



"HE SWUNG ROUND WITH THE ROPE, LIKE A WEIGHT ON THE
END OF A PENDULUM."—*Page 526.*

CLIMBING AND EXPLORATION
IN THE
KARAKORAM-HIMALAYAS

BY
WILLIAM MARTIN CONWAY

M.A., F.S.A., F.R.G.S.

*Vice-President of the Alpine Club ; formerly Roscoe Professor of Art in
University College, Liverpool, Victoria University*

WITH THREE HUNDRED ILLUSTRATIONS BY A. D. McCORMICK
AND A MAP



London
T. FISHER UNWIN
PATERNOSTER SQUARE
MDCCCXCIV

10369

In a hundred ages of the good, I could not tell the glories of Himūchal. As the dew is dried up by the morning sun, so are the sins of mankind by the sight of Himūchal.

MĀNAS-KHANDA PURĀNA

PREFACE.

IT is now time for me to take leave of this book. The journey which it commemorates was throughout delightful, and the revival of so many pleasant reminiscences has made the work of writing a continual enjoyment. It has recalled to mind pleasant hours spent with friendly companions, and the charming acquaintances we were privileged to make with our fellow-countrymen on the frontiers of India—the men who are there maintaining and extending so worthily the prestige of England's imperial power and the honour of her name. In the course of my story I have mentioned from time to time the kindnesses and the help received from various persons, to whom our thanks are due and are heartily rendered. I desire also to thank Mr. J. F. Duthie, the head of the Botanical Department at Saharanpur, for bringing my collection of plants safely down from Gilgit and for other valuable assistance. To Mr. John Eliot, Meteorological Reporter to the Indian Government, my thanks are also due for much valuable information willingly supplied. If I have omitted to acknowledge any other help rendered to me, I trust that such omission, which is assuredly accidental, will not be recorded against me.

A portion of the cost of the expedition was covered by grants from the Royal Geographical Society, the Royal Society, and the British Association. Such material help deserves warm recognition at my hands. The expedition was much more expensive than it need have been, but ex-

experience has to be purchased; mine is at the service of any future traveller who chooses to apply for it.

There were only two previous explorers of any part of the snowy regions, visited by us, whose work calls for mention in this place. They were Colonel Godwin-Austen, F.R.S., and Captain Younghusband. The former, when Assistant in the Great Trigonometrical Survey of India, visited the Karakoram mountains in the years 1860 and 1861. He has described his journeys in a paper, read before the Royal Geographical Society on the 11th of January, 1864, and published in the *Journal of the Society* for that year (p. 19, et seq.). He crossed the Skoro La, ascended the Baltoro glacier to the neighbourhood of where our "Hollow Camp" was situated, and the Punmah glacier to one of the Mustagh passes. From the foot of the Biafo glacier he mounted the east bank for about five miles and there ascended "a low knob," whence he could look straight up towards the snow-field at the glacier's head. He then descended the Braldo river, turned up the Basha valley, and reached the Nushik La from the south, returning by the same route to Arundo, and so to Shigar and Skardo. During this journey he was occupied in making a plane-table survey of the mountain regions. It must be remembered that the best then existing mountain-map was Dufour's Swiss Atlas. It was not, of course, the intention of the Indian Government to rival even that, but merely to indicate the position of watersheds, peaks, and main ridges, and the limits of glaciers. Colonel Godwin-Austen accomplished the work thus required of him. The draughtsman, who prepared his survey for the engraver, unfortunately had no conception of the aspect of snowy mountains, and altogether failed to distinguish between rock and snow arêtes and faces, with the result that, in the finished map, the glaciers appear to fill the bottoms of ditches between rounded and, as it were, grassy ridges. Colonel Godwin-Austen tells me that all the area of the Nobundi Sobundi and Choktoi tributaries of the Punmah glacier is practically snow-covered, with here and there a

crest of rock standing out from the white mantle. The map, as drawn by the draughtsman and engraved, gives no such impression.

It was the extraordinary appearance of the Karakoram glaciers, as thus represented, that first drew my attention to this region and made me desire to explore it. Before starting, I had an opportunity, through Colonel Godwin-Austen's kindness, of meeting him; and he gave me many useful hints. About the same time I was likewise fortunate enough to meet Captain Younghusband, who, in the year 1887, reopened the disused Mustagh pass, which gives access from the north to the basin of the Baltoro by way of the Piale tributary. The account of his adventurous passage of this pass will be found in the *Alpine Journal* (xiv. 50).

The expedition made by the brothers Robert and Adolph Schlagintweit in 1854-56 into Nepal and other portions of the Himalayas was not properly a mountaineering expedition, though some mountains were climbed and a height of 22,239 feet was reached. But Mr. W. W. Graham's expedition in 1883 to the mountains of Kumaon and Sikkim was a mountaineering expedition, because Mr. Graham was a trained climber; he was accompanied by two Swiss guides of repute, Emil Boss and Ulrich Kauffmann; and the making of ascents was his object. Unfortunately he was not acquainted with the use of instruments, did not take photographs, and was thus without means for fixing his positions with certainty or for measuring the approximate altitudes of points reached by him. He believed that he ascended Kabru, a peak of about 24,000 feet, but his experiences differ so widely from those of Dr. Güssfeldt, Mr. Whymper, Captain Bower, and all the members of my party at altitudes of 19,000 feet and upwards, that it is more than likely he was mistaken as to the point he climbed. Though hereafter he may be proved to have accomplished what he thought he accomplished, his ascent cannot for the present be accepted as authentic.

Mr. Edward Whymper, in his famous expedition made

In the years 1879-80 to the Great Andes of Ecuador, showed how a scientific mountaineering expedition should be organised, and what work it may attempt to do. I set him before me as a model for imitation, and, though I am conscious of having fallen below him in many important respects, and more especially as a collector, we should not have accomplished what we did without his example to spur us on.

The chief results of my work are the map and the present volume. How much of the former covers new ground or modifies in important respects the representation of physical features may be easily perceived by comparing it with the corresponding sheets of the Indian atlas, which are readily accessible. The two sheets of my map are too large for incorporation in the ordinary edition of this work, but they are issued with the Edition de luxe. The expense of engraving this map, as well as that of developing my many photographs, was borne by the Royal Geographical Society. It is scarcely necessary to add that my survey does not pretend to be more than a sketch survey. It was made under all the disadvantages of rapid travelling and in almost continuous bad weather. The parts were fitted together by help of the points trigonometrically determined by the Indian Survey.

Though an important part of my work, the map was only a part. The organisation of the expedition, the collections, and the journals occupied most of my time. I wrote every day a full account of the day's proceedings; in fact full notes were jotted down from hour to hour as we went along and carefully rewritten every evening. The journals thus prepared have been printed with few additions and little more than verbal changes. What the story thus loses in balance and smoothness, I hope it will gain in truth to the momentary impression of fact. Frequent references to and comparisons with effects observed in the Alps and elsewhere will be found throughout these pages. They will, I hope, serve to bring before the eyes of European climbers a more vivid notion of Himalayan scenery than I could otherwise hope to convey. The first

few chapters of the book have been written in a more flamboyant style than the remainder, of set purpose, in the hope thus to emphasise the contrast between the luxury of the plains and the barrenness of the hills.

In the matter of mountain nomenclature I have adhered to Alpine and Caucasian custom. Where a peak has a native name I use it. Where a peak rises from an alp or valley with a recognised name, the same name belongs to the peak. Native names take precedence of and exclude all others. Mountains that have no names I have named myself, for the purposes of this book and map, applying descriptive designations to them and never the names of persons. I have not called "K. 2" Mount Godwin-Austen, greatly though I appreciate that officer's work. I wished to name the mountain the Watchtower, but as any alternative designation seemed to give offence, where none was intended, I have confined myself to the letter and number of the Indian Atlas.

The total result of the expedition can be estimated by the reader of this volume and of the reports and scientific memoranda to be published in a separate volume with my maps in the autumn of this year. The length of our journey and the area of the survey can be estimated by a glance at the map. The list of altitudes measured will show the heights we attained. We spent, in all, 84 days on snow or glacier; we traversed from end to end, for the first time, the three longest known glaciers in the world outside the polar regions; and we climbed to the top of a peak approximately 23,000 feet high. The present volume is the literary record of our doings. The collections made include a series of sphygmograph tracings, which will form the subject of a paper by Professor Roy, of Cambridge. The collection of minerals has been reported on by Professor Bonney and Miss C. A. Raisin. The plants and seeds have been studied and named at Kew by Mr. W. B. Hemsley under the direction of Mr. Thiselton-Dyer. The butterflies were named by Mr. W. F. Kirby, of the British Museum, and the moths by Dr. A. G.

Butler, of the British Museum. The human skulls have formed the subject of a paper by Mr. W. L. H. Duckworth, of Cambridge. To all these men of science I return my best thanks. In addition to these collections I brought home about a thousand photographs, and Mr. McCormick made some three hundred water-colour drawings, and filled five volumes with pencil sketches.

It only remains for me now to recall the friends who went with me, and whose companionship and help made labour pleasant and work easy. No traveller was ever accompanied by a better artist than Mr. McCormick, whose illustrations adorn this volume and whose water-colour sketches, some of which were recently exhibited, have received on all hands praise, both high and well merited. No better travelling guide has ever been found than Mattias Zurbriggen, of Macugnaga, to whose energy so much of our success was due. Lieut. the Hon. C. G. Bruce (Fifth Gurkhas) and the four Gurkhas he brought with him were essential to all we accomplished, and I cannot now take leave of them without again expressing my hearty recognition of all they did for us, and my hope that, as they look back on the time passed in our company, they will not consider that their labours were spent in vain.

W. M. CONWAY.

LONDON, April 12th, 1894.

CONTENTS.

CHAPTER I.

	PAGE
LONDON TO ABBOTTABAD	1

CHAPTER II.

ABBOTTABAD TO SRINAGAR	20
-------------------------------	----

CHAPTER III.

IN THE VALE OF KASHMIR	42
-------------------------------	----

CHAPTER IV.

BANDIPUR TO BURZIL KOTHI	70
---------------------------------	----

CHAPTER V.

THE CROSSING OF THE BURZIL PASS TO ASTOR	88
---	----

CHAPTER VI.

ASTOR TO GILGIT	115
------------------------	-----

CHAPTER VII.

GILGIT TO DIRBAN	140
-------------------------	-----

CHAPTER VIII.

DIRBAN TO GARGO	163
------------------------	-----

CHAPTER IX.

GARGO TO GILGIT	190
------------------------	-----

CHAPTER X.

GILGIT TO TASHOT	214
------------------	-----	-----	-----	-----	-----	-----

CHAPTER XI.

TASHOT TO NAGYR	234
---------------------	-----	-----	-----	-----	-----	-----

CHAPTER XII

NAGYR TO BALITIT AND SAMAIYAR...	248
----------------------------------	-----	-----	-----	-----	-----

CHAPTER XIII.

THE SAMAIYAR VALLEY	264
---------------------	-----	-----	-----	-----	-----	-----

CHAPTER XIV.

NAGYR TO MIR	286
--------------	-----	-----	-----	-----	-----	-----

CHAPTER XV.

MIR TO HISPAR	305
------------------	-----	-----	-----	-----	-----	-----

CHAPTER XVI.

HISPAR TO HAIGUTUM	326
------------------------	----	-----	-----	-----	-----	-----

CHAPTER XVII.

THE NUSHIK LA	349
-------------------	-----	-----	-----	-----	-----	-----

CHAPTER XVIII.

THE HISPAR PASS	361
-----------------	-----	-----	-----	-----	-----	-----

CHAPTER XIX.

THE BIAFO GLACIER	389
-------------------	-----	-----	-----	-----	-----	-----

CHAPTER XX.

ASKOLE TO BALTOBO	413
-------------------	-----	-----	-----	-----	-----	-----

CHAPTER XXI.

ASCENT OF THE BALTOBO GLACIER	438
-------------------------------	-----	-----	-----	-----	-----	-----

CHAPTER XXII.

FAN SADDLE AND THRONE GLACIER	468
-------------------------------	-----	-----	-----	-----	-----	-----

CONTENTS.

xvii

CHAPTER XXIII.

	PAGE
THE ASCENT OF PIONEER PEAK	502

CHAPTER XXIV.

FOOTSTOOL CAMP TO ASKOLE	533
---------------------------------	-----

CHAPTER XXV.

ASKOLE TO SKARDO	555
-------------------------	-----

CHAPTER XXVI.

SKARDO TO KARGIL	577
-------------------------	-----

CHAPTER XXVII.

KARGIL TO LEH	604
----------------------	-----

CHAPTER XXVIII.

LEH AND HIMIS	630
----------------------	-----

CHAPTER XXIX.

LEH TO THE ZOJI LA	655
---------------------------	-----

CHAPTER XXX.

OVER THE ZOJI LA TO SRINAGAR	677
-------------------------------------	-----

GLOSSARY	697
-----------------	-----

INDEX	701
--------------	-----

LIST OF ILLUSTRATIONS.

“HE SWUNG ROUND WITH THE ROPE, LIKE A WEIGHT ON THE END OF A PENDULUM”						<i>Frontispiece</i>
ENTRANCE TO PORT SAID	...	...	...	...	...	1
APPROACHING EGYPT	...	...	...	...	...	3
COALING AT PORT SAID	...	...	...	...	...	5
AT ADEN	...	...	...	...	...	9
THE HOUR OF PRAYER, KARACHI RAILWAY STATION	...	...	...	...	...	11
STREET SCENE, LAHOR	...	...	...	...	...	14
STREET IN LAHOR	...	...	...	...	...	15
RANGIT SINGH'S SAMADH, LAHOR	...	...	...	...	...	19
EKKA	...	...	...	...	...	20
AMAR SING THAPA, OF THE FIFTH GURKHAS	...	...	...	...	...	21
GURKHA DANCING AT TANDIANI	...	...	...	...	...	22
BRINGING IN DINNER AT BAGNOTA	...	...	...	...	...	23
ROUDEBUSH STARTS IN AN EKKA	...	...	...	...	...	25
LOADING THE MULES	...	...	...	...	...	26
RAHIM ALI	...	...	...	...	...	27
ON THE ROAD TO GAHARI HABIBULLA	...	...	...	...	...	29
TEMPLE OF BHANIYAR	...	...	...	...	...	35
AFTER THE SQUALL	...	...	...	...	...	39
HOUSES OPPOSITE THE CHINAR BAGH, SRINAGAR	...	...	...	...	...	41
THE MUNSHI BAGH, SRINAGAR	...	...	...	...	...	42
TEMPLE ON THE TOP OF THE TAKHT-I-SULIMAN	...	...	...	...	...	43
MARTAND	...	...	...	...	...	45
PANDRETHAN	...	...	...	...	...	50

	PAGE
SHAH HAMADAN MOSQUE, SRINAGAR	52
THE MAHARAJA'S PALACE FROM THE JHELAM, SRINAGAR ...	54
ON THE DAL LAKE	57
THE SHALIMAR BAGH	60
ON THE DAL LAKE	61
GOING DOWN THE JHELAM THROUGH SRINAGAR	62
THE START FROM BANDIPUR	64
BOATS AT THE CHINAR BAGH	68
GURAI'S BRIDGE	70
TRAGBAL CAMP	72
PARBIR'S GREETING	75
AT GURAI'S	76
LOOKING DOWN THE VALLEY FROM BANGLA	77
PALAUER AT BANGLA	79
THE MESS TENT	83
COOLIE SMOKING AN EXCAVATED PIPE	87
LOOKING NORTHWARDS FROM BURZIL CAMP	88
COOLIES AT BURZIL	89
BURZIL CAMP	90
MAKING A SNOW BUST	91
MESS IN THE BURZIL HUT	92
CROSSING THE BURZIL PASS	94
CAMP ON THE ROOF OF CHILANG HUT	98
PITCHING CAMP AT MIKIEL	105
MOUNTAINS BEHIND MIKIEL	106
LOOKING UP THE VALLEY FROM ASTOR POLO-GROUND	108
THE FOURTH DANCER AT ASTOR	112
HUT AT KARRIM	114
HARAMOSH FROM BUNJI	115
DASHKIN	118
THE GREAT DICHELL PEAK	119
VIEW FROM DOIAN CAMP	120
ONE OF THE GUNDAI PEAKS, (16,200 FEET)	124

LIST OF ILLUSTRATIONS.

xxi

	PAGE
ON THE ROAD TO BUNJI	125
NANGA PARBAT (26,680 FEET) FROM BUNJI	131
"SALAAM! I KNOW NOTHING"	138
"BRUCE SAHIB KE WASTI!"	139
THE BARBER AT GILGIT	140
GILGIT FORT FROM THE NORTH-WEST	141
LOOKING UP THE VALLEY FROM GILGIT	142
DAINYOR ROPE-BRIDGE	146
SINAKAR	149
THE BULCHI BAND	152
LOOKING DOWN THE BAGROT VALLEY FROM BULCHI	154
DUBANNI (20,168 FEET) FROM DIRRAN	157
FROM HINARCHI MORAINÉ	160
KARBIR THAPA	162
UCHUBAGAN CAMP	163
UCHUBAGAN PASS AND SERPENT'S TOOTH FROM GARGO	168
THE DESCENT FROM SERPENT'S TOOTH	171
PALAUER AT DIRRAN	173
RAKIPUSHI AND CHIRING CHISH FROM GARGO	181
RAKIPUSHI FROM GARGO	184
UPPER BURCHI PEAK FROM GARGO	186
BONFIRE AT KAMAR	189
MORAINÉ AT GARGO... ..	190
UPPER AND LOWER BURCHI PEAKS AND EMERALD PEAK FROM BEHIND GARGO	192
GOING SURVEYING	196
RUNNING FROM THE DUST AVALANCHE	198
AMAR SING'S GLISSADE	202
A HEAVY LOAD	204
PRISTI AND THE THIEF	213
UNDER THE CHINARS AT GULMET	214
HARKBIR	215
NOMAL	217

	PAGE
GULMET BAGH	221
CALL TO PRAYER AT GULMET	224
OUTSIDE GULMET GATE... ..	226
PISAN	229
LOOKING DOWN THE HUNZA VALLEY FROM TASHOT ...	231
COOLIE AS S. GIOVANNI	233
LOOKING WEST OVER NAGYR FROM THE HOUSETOPS ...	234
BUBULI MUTIN	238
THE GORGE BELOW NAGYR FROM THE BURIAL-GROUND ...	239
NAGYR POOL FROM THE POLO-GROUND	240
A NIGHT VISIT TO NAGYR CEMETERY	244
THE JUNCTION OF THE HISPAR AND HOPAR VALLEYS ...	246
MUNSHI SHER AHMED	247
BALTIT FROM CAMP... ..	248
KARBIR	251
THE WAZIR OF HUNZA	254
THE THUM OF HUNZA	255
IN THE MESS-HUT AT BALTIT	257
THE FEATHERS OF HUNZA FROM THE HILL BEHIND NAGYR ...	262
FROM SAMAIYAR	263
SAMAIYAR	264
YOKED TO A MILL-STONE	266
BOIOHAGURDOANAS FROM THE SAMAIYAR VALLEY ...	268
TYING ON PABBUS	271
NAGYR	274
THE POLO-GROUND AT NAGYR	278
INTERIOR OF THE MATAM SARA, NAGYR	279
THE GOLDEN PARRI FROM NAGYR BURIAL-GROUND ...	281
INTERVIEW WITH THE RAJA OF NAGYR	283
NAGYR. THE PALACE FROM THE MAIN STREET	285
THE SAMAIYAR BAR AND SHALLIHURU GLACIERS FROM RASH RIDGE	286
CALLING THE COOLIES	287
RASH FROM RATTALLO	290

	PAGE
FRIGHTENED NATIVES AT HOPAR	292
SUNSET FROM WILD ROSE CAMP	299
ON THE BARPU GLACIER	301
MIR CAMP	303
BARPU... ..	304
CHOGO AND SADDLE PEAKS FROM DASSKARAM NEEDLE	305
SHALLIHURU SERACS	307
LOOKING DOWN THE SHALLIHURU GLACIER FROM THE SERACS	308
IN THE SHALLIHURU SERACS	310
COOLIES ON THE SHALLIHURU GLACIER	315
LOOKING UP THE SAMAIYAR BAR GLACIER FROM THE SOUTH SLOPE OF RASH RIDGE	318
RAKIPUSHI RANGE FROM NEAR THE UPPER RASH PASS	319
A SAND GLISSADE	322
MUD-AVALANCHE	324
IN THE HISPAR VALLEY	325
LOOKING UP THE HISPAR GLACIER FROM HAIGUTUM CAMP	326
STONE-MAN ON SHUKURRI	327
LOOKING UP TOWARDS THE HISPAR PASS FROM SHUKURRI	329
SHAH MURAT	330
ICE-CAVE OF THE HISPAR GLACIER	332
LOOKING UP THE HISPAR GLACIER FROM ABOVE CHOKUTENS	335
HISPAR PASS FROM GANDAR CAMP	340
BUILDING HUTS AT HAIGUTUM	344
SUNSET FROM HAIGUTUM	348
THE NUSHIK LA FROM KANIBASAR CAMP	349
LOOKING UP THE HISPAR GLACIER FROM THE FOOT OF THE NUSHIK LA	351
FROM HISPAR SNOWFIELD CAMP, LOOKING DOWN THE GLACIER TOWARDS THE NUSHIK LA	352
THE NUSHIK LA FROM KANIBASAR CAMP	360
"THE ROAD IS BAD!"	361
THE RIDGE PEAK FROM KANIBASAR CAMP	364

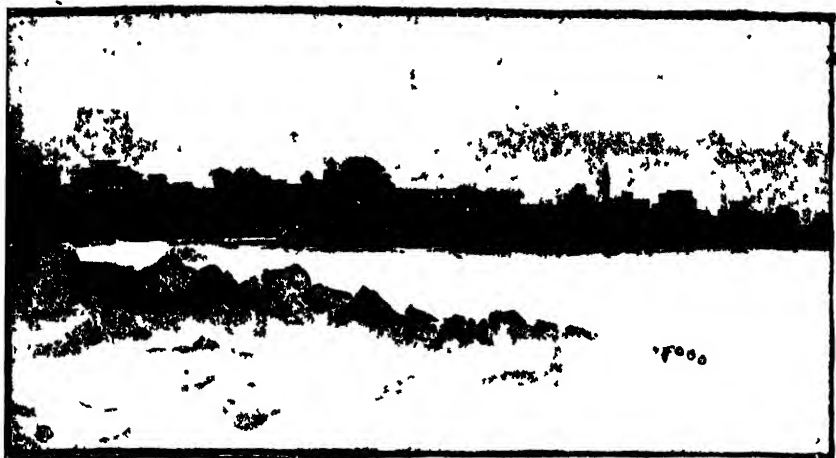
	PAGE
THE RIDGE PEAK FROM HISPAR SNOWFIELD CAMP	367
JUNCTION OF THE LAST GREAT SIDE-GLACIER WITH THE HISPAR GLACIER, FROM ABOVE SNOWFIELD CAMP	371
HISPAR SNOWFIELD NEAR THE PASS	375
ROCK-TOOTH NEAR THE HISPAR PASS	377
VIEW TO THE EAST FROM TOP OF THE HISPAR PASS	378
HALT ON THE TOP OF THE HISPAR PASS	380
THE DESCENT FROM THE HISPAR PASS	384
PEAKS ON THE EAST OF THE BIAFO SNOWFIELD	388
OGRE'S FINGERS FROM OGRE'S CAMP	389
THE OGRE FROM OGRE'S CAMP	391
THE BIAFO SNOWFIELD, LOOKING BACK FROM NEAR OGRE'S CAMP	395
BUILDING A STONE-MAN AT BOGGY CAMP	397
PEAKS WEST OF THE BIAFO GLACIER... ..	399
A FALSE STEP	405
MANGO GUSOR FROM THE END OF THE BIAFO GLACIER	408
FOOT OF BIAFO GLACIER FROM LASKAM ZIGZAGS	409
THE GREEN PARRI	410
ASKOLE	412
IN CAMP AT ASKOLE	413
EXAMINING WAZIR NAZAR ALI	415
CROSSING THE STREAMS BELOW THE BIAFO GLACIER	418
COOLIES AT KOROFON	420
MANGO GUSOR FROM THE ROPE-BRIDGE	423
CROSSING A FLOODED TORRENT IN THE PUNMAH VALLEY	425
ROCHESTER CRAGS FROM THE BALTORO VALLEY	431
FOOT OF THE BALTORO GLACIER.—I.	434
" " " II.	435
THE BIG STONE FROM BALTORO CAMP	436
IN CAMP, BALTORO	437
MASHERBRUM FROM THE SLOPES OF CRYSTAL PEAK	438
LOOKING UP BALTORO GLACIER, PEAKS BY THE NORTH BANK	439
PEAKS NORTH OF THE BALTORO GLACIER	442

	PAGE
ICE-CAVE ON THE BALTORO GLACIER	444
THE DURNI GLACIER FROM THE BALTORO	446
MASHERBRUM FROM STORAGE CAMP	450
THE MITRE FROM THE FOOT OF CRYSTAL PEAK	454
FIRST VIEW OF THE GOLDEN THRONE FROM THE FOOT OF CRYSTAL PEAK	455
LOOKING ACROSS THE BALTORO GLACIER FROM THE FOOT OF CRYSTAL PEAK	456
LOOKING ACROSS THE BALTORO GLACIER FROM THE SLOPES OF CRYSTAL PEAK	458
MUSTAGH TOWER FROM THE ARÊTE OF CRYSTAL PEAK	459
GUSHERBRUM FROM NEAR WHITE FAN CAMP	464
PEAK OPPOSITE WHITE FAN CAMP	466
LOOKING ACROSS FROM WHITE FAN CAMP	467
LOOKING SOUTH FROM FAN SADDLE	468
K. 2 FROM FAN SADDLE	469
BROAD PEAK FROM FAN SADDLE	471
COULOIR ABOVE FAN SADDLE	473
GOLDEN THRONE FROM JUNCTION CAMP	475
K. 2 FROM JUNCTION CAMP	478
CRAGS AT THE FOOT OF GUSHERBRUM FROM JUNCTION CAMP	480
IN JUNCTION CAMP	481
GOLDEN THRONE FROM JUNCTION CAMP	482
K. 2 FROM JUNCTION CAMP	484
K. 2 FROM THRONE GLACIER	487
THE GOLDEN THRONE FROM THRONE GLACIER	492
GLACIER LAKE-BASIN NEAR FOOTSTOOL CAMP	495
THE MITRE FROM FOOTSTOOL CAMP	497
THE HIDDEN PEAK FROM FOOTSTOOL CAMP	499
AT THE TACHEOMETER	501
THE BRIDE FROM THE ARÊTE OF PIONEER PEAK	502
NEW SNOW AMONGST THE SERACS	504
THE LOWER PLATEAU FROM SERAC CAMP	507

	PAGE
GOLDEN THRONE AND PIONEER PEAK FROM SERAC CAMP ...	508
SNOWY PYRAMID ABOVE FOOTSTOOL CAMP	511
LOWER PLATEAU CAMP	513
PIONEER PEAK FROM BETWEEN THE FIRST AND SECOND POINTS	518
PIONEER PEAK FROM THE SECOND POINT	519
THE BRIDE FROM THE SUMMIT OF PIONEER PEAK,	521
ON THE TOP OF PIONEER PEAK	523
VIEW LOOKING WEST FROM PIONEER PEAK	525
LOOKING FROM THE RIDGE OF PIONEER PEAK	526
LOOKING DOWN THE SIDE GLACIER FROM THE ARÊTE OF PIONEER	
PEAK	527
AFTER THE CLIMB	532
THE MUSTAGH TOWER FROM FOOTSTOOL CAMP	533
STARTING DOWN FROM FOOTSTOOL CAMP	534
MITRE PEAK FROM JUNCTION CAMP	535
THE VIGNE GLACIER FROM JUNCTION CAMP	536
THE MITRE FROM GOATS' DELIGHT CAMP	538
GOATS' DELIGHT CAMP	539
"THIS HOLDS!"	540
"NO, IT DOESN'T!"	540
ROCK-PEAKS ON THE NORTH SIDE OF THE BALTORO GLACIER	543
ULI BIAHO PEAKS FROM THE BALTORO GLACIER	545
GLACIER LAKE ON THE BALTORO	546
LOOKING DOWN THE ASKOLE VALLEY FROM THE FOOT OF THE	
BIAFO GLACIER	550
NEAR ASKOLE, LOOKING UP THE VALLEY	552
MANGO GUSOR FROM ASKOLE	553
THE PIALE GLACIER FROM CORNER CAMP	554
IN THE SHIGAR VALLEY	555
ASKOLE ROPE-BRIDGE FROM THE SOUTH BANK	556
A FALLING ROCK FROM MANGJONG	557
VILLAGERS DANCING AT THLA BROK	559
THE SKORO PASS FROM THE NORTH	562

	PAGE
GORGE IN THE SKORO VALLEY	564
LOOKING UP THE SHIGAR VALLEY	566
MAIN ROAD IN THE SHIGAR VALLEY	567
IN THE SHIGAR VALLEY	568
MOSQUE AT SHIGAR	570
SHIGAR	571
PREPARING THE ZUK	572
SKARDO	574
„	575
ZIARAT AT SHIGAR	576
FROM KARGIL CAMP	577
THE TEHSILDAR'S HOUSE AT SKARDO	578
FORT ON THE INDUS ROAD NEAR SKARDO	580
GOL MOSQUE	583
THE FAKIR OF TOLTI	587
KASHMIRI SEPOYS ENCAMPED AT KHURMANG	591
LOOKING UP THE INDUS VALLEY BETWEEN GIDIAGHDO AND TARKUTTI	594
THE INDUS ROAD ABOVE TARKUTTI	596
BILARGO: LOOKING UP THE DRAS	600
DRAS BRIDGE ABOVE HARDAS	601
THE INDUS ROAD	602
MAIDAN ABOVE KARGIL	604
CHORTENS AT SHARGOL	609
LAMA-YURU	616
LOOKING DOWN THE VALLEY FROM LAMA-YURU	619
GORGE BELOW LAMA-YURU	620
LOOKING UP THE INDUS FROM THE CORNER	621
STAGED CHORTEN AT BAZGO	626
INDUS BRIDGE AT KHALSI	629
LEH BAZAAR	630
THE YARKAND SERAI AT LEH	632
ENTRANCE TO HIMIS	636

	PAGE
HIMIS	637
IN HIMIS GONPA	641
ENTRANCE TO THE SECOND TEMPLE	643
AT HIMIS	646
NEAR HIMIS GONPA	649
LEH BAZAAR	651
CORNER OF LEH BAZAAR	653
WALL-PAINTING AT HIMIS	654
ON THE ROAD TO LEH	655
BAZGO GATE	656
EARTH-PYRAMIDS NEAR LAMA-YURU	663
FARM IN THE WAKKHA VALLEY	668
LOOKING UP THE DRAS VALLEY OVER THE FIELDS OF PALA...	673
LOOKING UP THE DRAS FROM BELOW TASHGOM... ..	676
THE HEAD OF THE SIND VALLEY FROM NEAR THE TOP OF THE ZOJI LA	677
APPROACHING THE ZOJI LA	678
LOOKING BACK FROM SONAMERG	683
TEMPLE AT WANGAT	688
ON THE JHELAM, SRINAGAR	693
IN SRINAGAR	694



ENTRANCE TO PORT SAID.

CHAPTER I.

LONDON TO ABBOTTABAD.

ON the evening of Friday, February 5th, 1892, most of our party left Fenchurch Street station and started on the journey which it is the object of this volume to describe. We were six in number—to wit, Mr. A. D. McCormick, the well-known artist; his friend and mine, Mr. J. H. Roudebush; Mr. O. Eckenstein; Mattias Zurbriggen, the Alpine guide of Macugnaga; Parbir Thapa, a sepoy of the first battalion of the Fifth Gurkhas; and myself. The train hurried us through the glare and darkness of the East End, the beauty of which revealed itself by being in harmony with our mood, a product of the pain of parting and the thrill of hope. We descended at the Albert Docks and felt our way through deserted sheds, out on to the quay beyond. The electric moons emphasised the loneliness of the place. A line of P. and O. giants seemed to lie asleep beside the white pavement, and our little ship, the *Ocampo*, behind them, was like one of their children,

•short and low in the water, beneath their empty towering hulls.

We sailed early next morning (Feb. 6th) in dull and chilly weather. About three o'clock we came to off Dover, in rain and mist, and put the pilot ashore; then we turned to the grey west and felt the sea begin to heave and the cold wind to blow. Our poor boat was slow, and not till three days had passed did we find the satisfaction of southern airs and sunny skies. On Feb. 11th we rounded Cape St. Vincent, and a wonderful moonlight night followed, the fresh air fragrant as with the perfume of oriental gardens. The bright sky and breeze, just crisping the water and scattering diamonds above the waves, made laughter over the sea. But next day, as we were struggling through the Straits of Gibraltar against a gale of wind, which for a time almost neutralised our vessel's steaming powers, there was something grim and warlike in the ocean's mirth. The waves were big and strong, and the spray drifted in sheets off their crests. The wind roared in the rigging, and the water rolled noisily along. The sun, bright as ever, made the foam like snow and struck rainbows across the spray between us and the bare blue hills of Spain. Africa lay in the light under the sun. There the coast was lower, the sky-line softer, the hills more gentle than to the north. The water mirrored the sun like glass. The graceful form of a gull was the only black spot between me and the bright sky. Spain-wards the view appeared over the dazzling bulwarks, above which from time to time shining water leaped into the air. In the evening, when the setting sun hung for a moment tangent to the horizon, its red splendour was midway between the Pillars of Hercules, and the westward path was paved with gold. At dawn next day the pink light, that had travelled round the world, decked the snowfields of the long Sierra Nevada, whilst in the afternoon the African hills lifted the graceful outlines of their highest points above the southern horizon. We approached them gradually and saw their sides dotted over

with splashes of sunlight through holes in the hurrying clouds. Broken lines of sparkling glory enlivened the margin of the sea and looked as though, beyond it, must be the very land of gold. Presently the first heave of a swell came upon us from the Gulf of Lyons, and before long we were rolling 33°, and everything was rattling about on the ship. Three iron pails and two balls (used for correcting compass errors) got loose and went waltzing about together, and so continued through the night. The long unlovely swell did not leave us till late on the 15th, when we passed by moonlight between the Galita islands, which, as we first saw them, rose like white cumulus clouds out



APPROACHING EGYPT.

of the sea. Next day brought us near graceful, many-terraced Pantellaria, which so many travellers have seen and so few visited, and then we passed Malta in the night, and lost sight of land once more. A little wind, a little swell, a little rippling of the water, a few flecks of cloud in the sky, a bright sun and a pleasant warmth—such were the characteristics of the simple conditions which accompanied us to Port Said, where, in the evening of Feb. 21st, we were at last able to land and feel the joy of solid earth beneath our feet, and the freedom of the shore. Some of us, to whom the sordid place was new, went to see the sights, buy mementoes, and what not. I overheard one bargaining

with a photograph seller. "Excuse me, sir," the man urged, "your fingers not all alike, one big, one little. My photographs some a shilling, some sixpence."

Meantime I watched the coaling of a big liner, which is the only thing worth seeing at Port Said. My journal of the year 1888 gives the following description of such a scene in the same place:—

"As I write, the moon, a little past full, is endeavouring to flood the harbour with its beams, but there is a blackness about the place that nothing can lighten. Moreover, we are coaling, and the sight is one to be remembered. As night closed in, many black barges, casting shadows towards us, came gliding over the water. Each one was lit by smoky beacons of coals burning in iron baskets; and black ghosts with cowed heads and wiry arms kept flitting hither and thither across the ill-omened-looking lights. Shouts and strange voices arose from the hulks with more frequency and distinctness as those destined for our ship came alongside and moored to her. Presently fearful creatures began labouring together to raise long planks, in pairs for going and returning, as gangways to the ship. As they worked they chaunted, or rather shrieked, a piercing refrain of indistinguishable words—*dö rē dö, dö rē dö*. Then began a whirling and hurrying of the black ghostly forms, as of ants on a disturbed heap, a seemingly aimless shouting and running to and fro; but visible order ultimately emerged, and a continuous stream of soot-black humanity, noiseless and naked of foot, now pours from each hulk up one of the planks. Every man carries on his head a basket, foul as himself, containing some half sackful of coals. Close on the heels of one another they vanish, shrilly shrieking, into the bowels of the ship. Presently they reappear with baskets empty, race down the return plank, and leap into the smoke and confusion of their hulk. There is no moment's pause till the barge is cleared, no cessation of their cries. As they begin to descend they cast their baskets down into the hulk below, and when they get down themselves they separate in haste to different corners, where they instantly pick up and bear off on their heads other baskets, filled meantime by other ghosts, working ceaselessly with clicking spades. It is impossible to follow the distribution of the returning stream. Again and again have I fixed my eyes upon one man, determined to watch his complete orbit, but in a moment he melts into the night and another takes his place. There is no pause nor check in the double current of upward and downward movement. The smoke from the flaring beacons drifts and eddies over all, and now the scene is engulfed in the deeper blackness of a cloud of fine coal-dust, rising like steam from every labourer, tossed up by the heavers and scattered from the baskets. The flaring beacons only fitfully illumine one side of the forms close to them; the other side is buried in



COALING AT PORT SAID.

darkness. The calm moon shines; beyond lies the still water; and enshrouding all is the silent night."

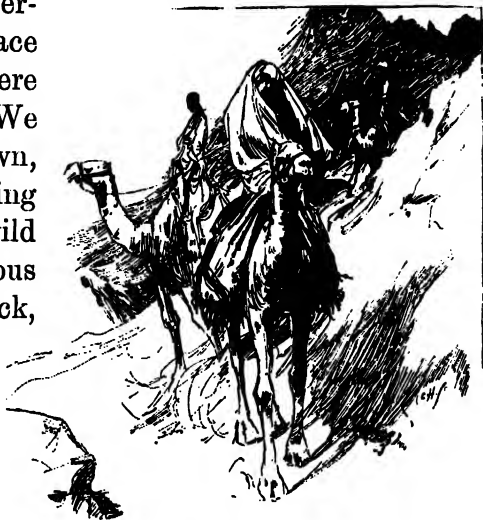
We only stayed about ten hours at Port Said. At 3 a.m. on February 22nd we entered the canal, our ship carrying the usual electric search-light at her bow. Its great beam shining along the water and over the desert is always a beautiful object. There was a school of dolphins in the canal before us, and when they leaped out of the water the light turned them into silver fish. We passed a vessel moored against the bank, and again all its ropes and spars were turned to silver. When the sun had risen over the desert in its accustomed grand simplicity, so different from the complex glories of the northern dawn, I went to bed, and only came on deck again as we passed Ismailia with its pleasant woods. The sun set when we were in the midst of the Bitter Lake, whose beauties of brightness and colour await the praise that is their due. Suez was passed in the night, and the morning of February 23rd saw us steaming down the gulf with a strong breeze in our favour. We threaded an avenue of finely-formed mountains, golden in colour and barren as the moon. But for the width of the water, its blueness, and the absence of the belt of green, we might have been in the Nile valley. At one point the western hills mimicked the forms of those over against Thebes. When the sun set behind them the sea was purple, the shore and hills a lighter tone of the same, and the sky brilliant yellow, fading upwards through amethyst into blue. Northwards the tones were richer. In the east the outliers of Sinai were dipped in rose. They faded away in the pink-grey mist that made magic around them, and were finally transformed into seemingly insubstantial mirages on the verge of night.

The following day (February 24th) was again perfection, a clear sky, a fresh breeze from the north blowing us along, and the temperature exactly right. The sun set after the Egyptian manner, pale and delicate in colouring at

first, then blazing with all the splendours of Nefer-Tum's richest raiment. A hazy, grey day followed, such as the English Channel mostly knows; the north wind dropped, and a damp, warm air made us all feel languid and heavy. On the 28th we encountered the usual south wind that belongs to the lower part of the Red Sea, and all awnings and loose canvas flapped about and robbed us of repose. Not till the morning of the 29th did our lazy craft reveal, far over the level gulf, the ruined craters that look down upon Great and Little Aden. They rise like islands out of the sand-flats around, and form the portal of the bay. Precipitous, broken, barren, and utterly desolate, with a purple roof of heavy cloud poised above them, they were the most melancholy mountains we had ever beheld. I climbed on to the fo'c'sle-head the better to watch the development of the view as we entered the harbour. The water through which we cleft our way was full of brilliant jellyfish, like purple passion-flowers floating within trembling gossamer cups. A shark made eddies not far away. Rag-encircled Somali boys presently surrounded us in their frail dug-out canoes; amphibious creatures they were, equally at home in or out of the water. We hastened ashore as soon as possible, delighted to quit for a few hours the restless surface of the hateful sea.

Everything we saw pleased us; we were surrounded by the wondrous Orient. For Aden is the East, as Port Said is not. Port Said is Levantine. Aden is Arab. The life of Aden is the life of Arabia. Europe goes for nothing in the native quarter and upon the roads. Arab and Somali vagabonds are everywhere in sight, riding their camels and their donkeys in all the elegance of a free costume. The yellow rocks gave the tone to the landscape, and bright raiment harmonised with it. After driving for a mile or two along the shore, where native seamen were mending their cumbrous boats and coloured sails, we mounted the outside of the crater by zigzags to the notch giving access to Aden town that lies within

the cup. It was like climbing a cinder. Vesuvius seems less volcanic than this long extinct volcano. A steep hill led down between walls of yellow rock, upon which the sun shone, and upon a caravan of camel-riding Arabs coming towards us, as perfectly adapted to the place as if they had been set there to complete the scene. We passed through the town, and reached the opening of the narrow and wild gorge, with precipitous sides of cinder-like rock, in which the famous Tanks are situated. From stage to stage the gorge is artificially dammed across, and the pools thus formed are



AT ADEN.

lined with cement. Though the arrangement is an ancient one, it presents no appearance of antiquity. In the afternoon we drove back to the harbour by another route, which took us out of the crater through a tunnel; we reached the ship as she was weighing anchor. An hour or so later Aden hill was massed in purple on the western horizon against a golden sky, and we were speeding eastwards. During the days that followed, a level sea was our portion. I once only found energy to write a note. It was about noon on March 1st.

“The sea, just crisped over with a pretty rippling, could scarcely be flatter than it is to-day, though a trifling undulation of the ship from stem to stern shows that there is a faint swell passing under it. The clear outline of the far horizon is adorned by the same graceful movement, the heaving of drowsy Neptune’s breast. A soft air comes from the north-east and lazily flaps the awning. Fleecy cloudlets float in the sky, which is grey with the presence of a delicate mist. Far off to the north a studious and concentrated vision can just discern the dim forms

• of the mountain forehead of Arabia. Porpoises arouse my envy by their delicious gambols in the water, and white-breasted gulls rest upon it, careless about our passing. On board all the passengers are recumbent and every face expresses satisfaction and dreamy repose. No one speaks. Most sleep. A few make pretence to read."

The night (March 6th) before we reached Karachi the sea was smooth, the moon near the zenith, and there was a gorgeous display of phosphorescence. Its quality was more remarkable than its quantity. The ship's bows clove a wondrous break of fire through the water, and the spreading waves swept back from them like a swan's wings, but of light. The foam drifted into the hollows as smoke from flame. All else was utterly black, and the light was fretted out upon it. Now and again some shark or other fish darted away from the ship and made lightnings in his wake.

At dawn next morning (March 7th) land was seen ahead, and presently a line of desert hills appeared in the north. A few strange-shaped rocks and a headland with a beacon guided us into port, and we finally landed on the modern and well-machined quay of Karachi by eleven o'clock. I drove to the town at once to make various necessary arrangements.

The first impression received was one of breadth. The land was all flat—tidal mud-swamps and areas recently reclaimed. The houses stood widely apart, each in its own considerable and usually bare compound. There was a general look of newness and well-to-doness. The houses of business were veritable stone palaces, in which arches and columns were freely introduced. I noticed several examples of praiseworthy architecture, such as Bombay does not possess. Where wealth and a warm climate meet, architecture is liable to flourish. The living East was around us, but Indian humanity hereabouts is certainly less picturesque than an Arab or Egyptian crowd. Light reigned supreme and ennobled everything; details vanished into light, not, as at home, into shadow. The value

of colour was extraordinary. No wonder that it has been perceived by all the peoples of the East as far back as we can follow them.

Returning to the ship to dine and bid farewell to our fellow-voyagers, we found Zurbriggen in dispute with a cab-driver. He appealed to me. "Ich bin mit Ihm accordirt, hab Ihm das (a coin) gezeigt und jetzt will Er mehr —ja! zum Teufel!" In due time we reached the station and encountered our first babu at the ticket-office, where I had

to sign some papers. "Write little plainer, sir," he said; "excuse my presumptions!"

Almost before the train started I was asleep, and did not wake till there were signs of dawn (March

8th). We were rounding the foot of some barren hills, where they abut on the Indus near Laki. The railroad is cut along a slope of detritus brought down in the rains in the form of mud avalanches. This desert foreground dipped down to the river, and, from the best point of view, the hills curved round and bounded the landscape on the right. The plain lay in purple darkness, and the Indus decorated it with a silver band. Presently, and long before the



THE HOUR OF PRAYER, KARACHI
RAILWAY STATION.

colour in the heavens would have suggested to a European eye that the sun was so near, a line of fire defined the far horizon, and quickly grew into a dome. A spark of light appeared above it, widened, and so joined itself downwards to the waxing orb. The series of changes followed, which are here suggested, before the completed circle of the sun finally soared aloft.



As the day advanced the foreground became golden. Detail of bush and shrub appeared all over the flat, with here and there a tree or two, and the outlines of rice fields awaiting their season to grow green. We left the hills behind and, hour after hour, travelled through the plain, now and again coming across a patch that might have been in England, but for the most part seeing no detail that was not novel, no sight (whether of man, or beast, or vegetation, or architecture) that was not strange. After we had lunched at Sakkar the train carried us, by the big cantilever bridge, over the Indus to Rohri. We caught fascinating glimpses of the river, with its charming banks and islands, and of the picturesque town, with blue-domed mosques, palaces, and other buildings, whole or in ruins, delightfully grouped together. The afternoon was sufficiently hot for the time of year (90° Fahr. in the carriage), but the night that followed seemed bitterly cold, and we were glad of our warmest wraps. After crossing the Sutlej and passing through Multan, we entered a tract of worse and flatter desert than before, and along this lay the remainder of the journey (March 9th). We were getting perceptibly further north, and the noon temperature sank to 85° Fahr. About one o'clock we entered a richly cultivated area, and it presently became apparent that a great and ancient Mussulman city was near at hand. We

passed the domes and minarets of the tombs of mighty men, and before four o'clock we were driving through the streets of Lahor. Roudebush and I determined to have a day's rest at the hotel. The others made a halt of a few hours, and took the evening train for Hasan Abdal.

Without delay we visited the old native town, anxious to come at last into contact with the unaltered East. A few paces within the gate, and Europe was no more. The old streets of irregular houses with carved and latticed windows, lurking portals, crowded stalls, many-coloured wares, the narrow alleys, the dust, the sunlight, and everywhere the abounding and indescribable population—these were the rough elements that immediately impressed us. They dazed McCormick at the first glance. We met him an hour later in a speechless and limp condition. He fell a-murmuring platitudes of wonderment, but gave it up and roved away as though walking in his sleep. We visited various buildings, but it was the light and the people that held our eyes. The Holi festival was going on, and the streets were fuller than usual. The men had smeared their white garments with pink dye, and the town was generally "painted red," both literally and metaphorically. A narrow street of pot and pan, vegetable and meat shops, with carved nodding house fronts above, was so packed with folk that we were brought to a halt. Large turbans, white, pink, amber-coloured, dark purple, and I know not what other tints, made a moving mosaic over the crowd. The air was full of dust, and the golden evening sunshine struck through it and made a permeating radiance everywhere. Strips of cotton, dyed blue or crimson, hung overhead from cords stretched across the lane; they waved gently to and fro above the fluttering of coloured raiment, the flashing of dark eyes, the glint of metal, and the going of men—ever changing, ever moving, fresh combinations, fresh contrasts: all as effective for background, grouping, and colour, as if they had been designed for a stage on some grand

occasion when the payments were high and the audience select.

We followed this road through an archway that, in the evening light and the glamour of the moment, seemed to be a fine work of architecture; we went on, past many a mosque and praying-place, many a decorated well and sculptured façade, through the palace square to the palace itself. We entered within its massive walls, and climbed about sunset on to the roof of its highest chamber.

What a view! The palace courtyard at our feet and its pavilions of marble inlaid with precious stones; the city



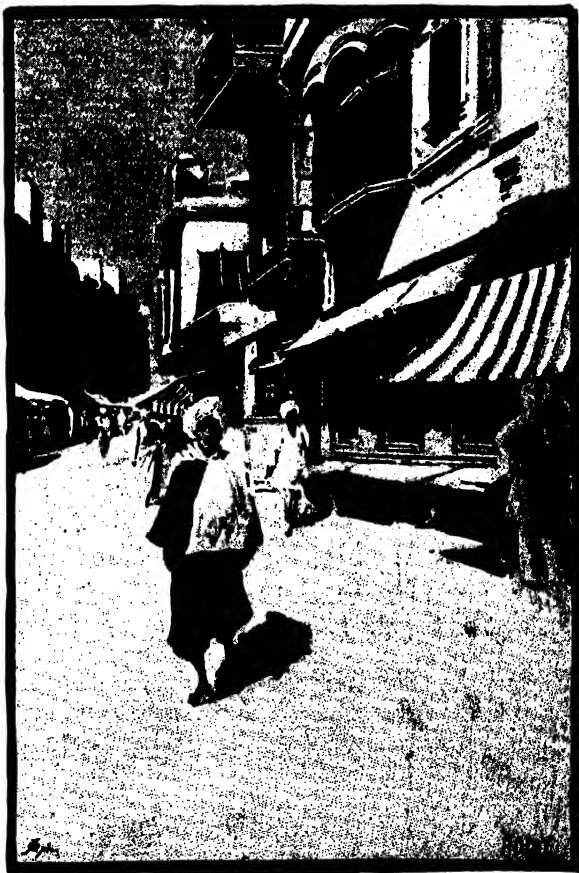
STREET SCENE, LAHOR.

and the great mosque beyond, with marble domes shining silvery above the pink stone walls; the vast plain spread around, rich with trees and all fertility, like a park to look upon; atmosphere and colour everywhere; here a drift of purple wood-smoke, there a cloud of golden dust; over all the broad, bright sunshine, streaming out of the west and flashed back in points of brilliance from the distant domes and minarets of tree-embowered tombs; the clear, reposeful sky overhead, and repeated at our feet on the calm bosom of the silent Ravi flowing from the hills

that were our not forgotten goal.

Next day (March 10th) we visited the various monuments in soberer mood. The glamour was gone from the streets, but their interest was as great as ever. We went to the Mosque of Vazir Khan, a collection of cubical masses of brick building decorated with large areas of beautiful tiles in the Persian manner, and arranged about a courtyard, with a fine pavilion for entrance gate, and a dome-covered *liwan* across the further side. Each component cube is entered by a well proportioned arch. Admirable are the level out-

lines, the simple forms, and the harmony of the whole. The lucidity of the artistic ideal of Islam finds perfect expression in this type of building. We went on to the great mosque whose larger area and lighter forms are characteristic of the Moghal epoch. We cast a glance at the Golden Mosque, but did not linger over it, for, though its marble walls and gilt domes look picturesque from the street, its forms are heavy, its proportions bad, and its decoration vulgar. We spent an hour in the shade of a marble pavilion in the old garden near the palace, a graceful edifice enough, about a century old. The heavy splendours of carving and gilt of the Sikh monuments



STREET IN LAHOR.

close by did not long delay us, nor, save the materials of which they were built, was there much to admire in the pavilions of the palace, which we visited again under the guidance of a British soldier. I would have sworn that he was Ortheris in the flesh, but his conversation was in a dialect I little understood. Why

wert thou not there in thine own city to interpret it, *Rubicunde Laudator Mulvanii* ! where every bookstall proclaimed thee, and thy name was in every mouth ? Finally we went to the museum to hunt up the few and shattered remains of the Gandhara school of decorative sculpture, which can better be studied here than elsewhere in the world. It presents a strange mingling of Hellenistic, Roman, Byzantine, and Persian elements succeeding one another, and all swiftly levelled by the Hindu capacity for absorbing the externals without receiving the spirit of the West. Historians of art as a rule declare that the influence of the East has been *nil* upon Western art, whereas the East has constantly been influenced by the West. The exact contrary is the case. The West throughout all the centuries has continually been touched by the decorative Eastern tendencies, whereas the East has as continually swallowed whole the forms of the West, but never failed, in doing so, to destroy the spirit that animated them, and to retain unaltered her own peculiar idiosyncrasies. When we returned to the hotel the usual crowd of petty dealers surrounded us and made the floor of the veranda gay with drifts and piles of embroideries and stuffs that we did not want ; but I liked to see the crouching people amongst their gay wares, which they seemed to find pleasure in displaying, and a volatile globe-trotting Gaul presently made it worth their while.

The evening saw us once more in the train speeding northwards towards the hills, and, when we awoke next day (March 11th), it was clear that the end of our journey by rail was at hand. We were still in the plains, about half way between Jhelam and Rawal Pindi, but the rampart of the north was visible, and the sun presently rose from behind the hills and shone down their hither slopes, revealing snow-beds and crests as of everlasting ice. The foreground was a strange maze of twisting gullies cut about in all directions by torrents of the rains, and leaving

little of the level floor of the plain unbroken. But further away the edges of the gullies were foreshortened against one another, and an effect of flatness was produced, stretching to the purple foot-hills, over whose crests and through their gaps the higher snowy outlines of the Pir Panjal Himalayas were revealed. Here and there cloud cataracts poured over the cold ridges, but only to melt away in the warm southern air. It was a fine scene, but not comparable to the view of the Alps from Lombardy. The southern slopes of the foot-hills are absolutely barren; but a line of trees along their crest indicates the existence of forests beyond. We were passing over historic ground. The ruins of Taxila were not far distant. Well-directed eyes might have discovered the broken mounds of ancient topes, with which the country, trodden by the feet of Buddha, is strewn. Our long and heavy train crawled slowly up the successive inclines. "Look there," said a travelling companion; "that is Pindi; and there, on that rather pointed hill, is Marri. In two hours you will be at Hasan Abdal."

We, in fact, arrived there about noon and joyfully exchanged the train for a *tonga*.* The seats are as in a dog-cart, and the thing is covered by a white barrel-vaulted awning. Instead of shafts there is a pole with an iron yoke at the end of it, to which the horses are rapidly attached. The animals, thus untrammelled in their movements, go off at a canter, rattling the iron yoke against the pole and splitting off minute metallic fragments liable to get into one's eyes if one sits facing the horses. We quitted the plain almost at once, and entered a gradually narrowing valley. Purple-coloured barren hills of simple form shut us in on both sides. There were trees planted along the road. The fields were being

* The *tonga* is the *carpentum* of the Romans and of Gaul, practically unchanged, such as we see it in a bas-relief at Trèves. The same form of vehicle survives in the *bros* of Aquitaine.

ploughed. The villages were at first of mud-built hovels ; higher up the walls became stonier and seemed to partake of the mountain nature where they stood in mountain fastnesses. Picturesque figures animated the road, and there were always plenty in sight. My attention was specially attracted by one, draped in a skirt of palest blue, the superfluous length of which was daintily girt about a slender waist, revealing small feet and neatly turned ankles. The head was enveloped in a coloured handkerchief, tied bonnet-wise under the chin, and this hid the profile from me ; presently a turn of the neck revealed to me a pair of merry eyes indeed, but also a well-grown beard and moustache. The thing was a man.

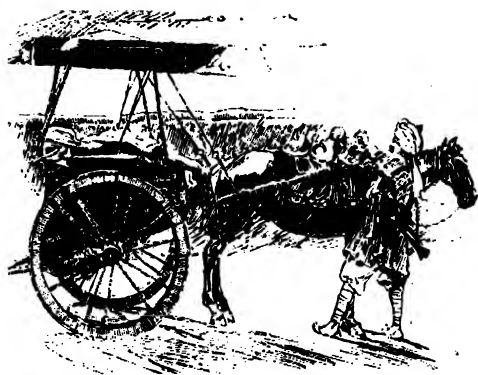
There were vistas on all sides of hills swathed in winter snow, but as we advanced we came to where spring was reigning in the valley, manifested by the budding green on the bare trees, the blossoms of hawthorn, or what appeared to be hawthorn, and the shooting of barley and wheat. The valley narrowed and the hills came together, with always the same bare slopes, like those about Assisi, where St. Francis beheld the wonder of the seraph and received the mystic wounds. When three-fourths of the way were left behind, the valley divided, and we went up its western branch, along what was in places a striking gorge, the walls being cut down straight through the deep alluvium. Then we came among trees into a French-looking region, and so reached the col at the top of the valley and beheld Abbottabad and all its pleasant houses, dotted about over tree-covered slopes by the side of an ancient lake-basin, in the midst of considerable hills. We halted at the dâk bangla to learn of the safe arrival of Lieut.-Colonel Lloyd-Dickin, who was to join us as a collector of birds, and then we proceeded to our destination. This was the bangla of the last member of our party that remains to be mentioned, but by no means

the least important, Lieut. the Hon. C. G. Bruce, of the first battalion of the Fifth Gurkha Rifles. He presently came in, and thus our party was completed without failure or mishap. We slept in peace under Bruce's hospitable roof. Across the brow of the morrow's dawn were inscribed the words

INCIPIT VITA NUOVA.



RANGIT SINGH'S SAMADH, LAHOR.



EKKA.

CHAPTER II.

ABBOTTABAD TO SRINAGAR.

I REMAINED at Abbottabad from the 11th till the 28th of March. This long halt was caused by delay in the arrival of the heavy baggage from Karachi. We found life in the headquarters of the Frontier Force extremely interesting, and the kindness extended to us on all hands made it more than usually agreeable. We were being admitted into one of the workshops, the like of which have fashioned and are fashioning the British Empire. That astonishing outcome of organised energy and effort became less incomprehensible to us the more intimately we associated with the kind of men who have made it. The wisdom and capacity of the seniors were felt to be the natural fruit of the strenuous vigour, the *esprit de corps*, the perfect discipline, the alert intelligence of their earlier years; and the self-same promising qualities now belong to the present generation of juniors, who are following with not unequal steps nor less heroic temper, and will, in their turn, occupy and succeed in high positions of responsibility and command. The

intimate and pleasant relations existing between officers and men of the native, especially the Gurkha, regiments were delightful to watch. It is hardly necessary to add that we were made debtors in all directions for benefits received, and that the memory of them will not soon pass away.

During our stay the Indian Government gave its approval to the general outline of our plans, and I was put in possession of such information likely to be serviceable as official sources could supply. Sir William Lockhart, amongst his numerous acts of kindness, used his influence in our favour. Bruce was allowed to accompany us on duty, and to bring with him four Gurkha sepoys belonging to the first battalion of the Fifth Gurkhas. Colonel Gaselee permitted us to have four first-rate men out of



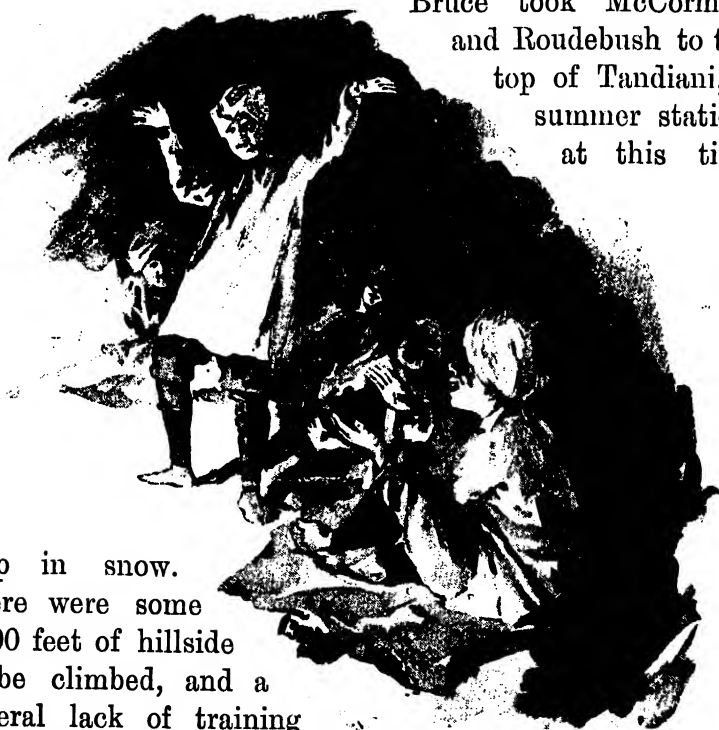
AMAR SING THAPA, OF THE FIFTH GURKHAS.

his regiment, in which individual excellence averages so high. Of these men I shall hereafter have much to say. They were invaluable to us, and the reader will have ample opportunity to discover that such was the case.

Abbottabad is situated in the midst of the belt of hilly country between the Indus and Jhelam rivers. The scenery of the complex valley system around it is not unlike that of the Italian lakes, except that the water is missing. There are

lake-basins, but no lakes. The life of the place, native and European, has been so well described in Prof. James Darmesteter's book,* that I need do no more than refer the reader to its pages. During our stay we made a variety of minor excursions, but I was too busy to take part in most of them. One day a wolf was reported, and a great drive over the hills was organised by Bruce. The Gurkhas entered thoroughly into the sport, and beat the hillsides in a broad line, but only jackals were bagged. Another time

Bruce took McCormick and Roudebush to the top of Tandiani, a summer station, at this time



GURKHA DANCING AT TANDIANI.

deep in snow.

There were some 5,000 feet of hillside to be climbed, and a general lack of training soon made itself apparent.

The novices had to be hoisted up the final slopes, and swore that hillsides were made to be painted but not climbed. They passed a merry night or two in the deserted huts, enlivened by the exhaustless mirth of their Gurkha companions. The energetic Bruce next carried McCormick off to Bagnota, another hill-station.

* "Lettres sur l'Inde" (Paris, 1888), pp. 195-237.

to the eastwards. They arrived there in the dark and found the whole place deserted. The Gurkhas went a long distance with a bath to fetch water. A tree was cut down for firewood, a sheep killed and cut up. The flesh was cooked in Homeric fashion, and brought in by torch-bearers to be consumed within the hut.

When the endless writing, that I had daily to get through, was done, I used to wander up the little slate hill behind Bruce's bangla. It is called the Brigade Circular, and has been planted with trees—I suppose by the same wise man who made the whole place so green. The summit is only about 750 feet above the cantonments, and a good path has been made to it; but the view is superb. I used to watch the sunset sweeping a broad purple shadow across the empty lake-basin, and colouring the opposing front of Tandiani a wondrous crimson with rich blue shadows in the gullies. Away to the west, just on this side the Indus, was the Black Mountain, with whose turbulent tribes the Abbottabad troops have so often been engaged. Further off a long line of snowy peaks, the mountains of Chakesar, led the eye northwards to regions almost unknown.* Range succeeded range on every side. There



BRINGING IN DINNER AT BAGNOTA.

* A nearer peak, at this time deeply snow-clad, called Moussa-ka-Masala, was climbed in 1889 by Captain J. O. S. Fayrer and Mr. Davies, of the Fifth Gurkhas, with some of their men.

was no tiring of the complexity of the forms and the wealth of the colours in this noble panorama.

The aspect of the landscape confirmed the information we received to the effect that the preceding winter had been an exceptionally mild one. There was far less than the normal amount of snow on the hills. Moreover the season was unusually advanced. The heat was of the kind proper to the end of April. The spring avalanches were reported to be already falling in Kashmir. Such conditions were favourable to our journey.

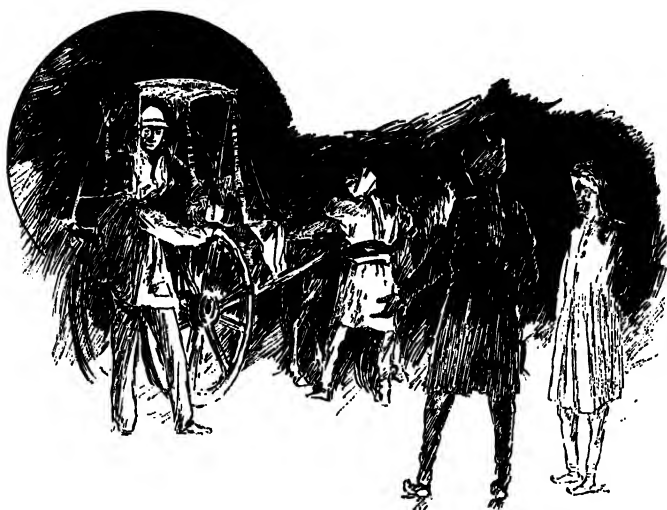
On two different days we all crossed the valley and climbed a ridge on the opposite side, named Serban. By going round to the back of it we found a wall of crags that afforded respectable scrambling of the Welsh sort. We were parched with thirst on the ascent, but discovered a charming well in the midst of a little grove of trees close to a village on the crest where we drank deep draughts of clearest water. The summit was about 2,000 feet above Abbottabad, and commanded a view similar to but more extensive than that from the Brigade Circular. We saw Bengra in Tanawal, the Machai Peak of the Black Mountain, the snows of Chakesar, the Moussa-ka-Masala group, and Kafir Khan at the end of the Kaj Nag.

On the 17th of March Dickin and Roudebush started off for the Lolab valley in Kashmir. They never got there. They had various adventures, losing their way by night on a hillside, and having to sleep in a water-mill, where the miller found them, and, mistaking them for robbers, was on the point of turning on the water and grinding them up. They met us again at Srinagar.

Our heavy baggage reached Abbottabad on the 22nd, but not till the 28th was it all prepared for the final start. It was loaded up by twenty regimental transport mules, kindly placed at our disposal by Lieutenant Phillips, with the approval of Colonel Gaselee and Colonel Molloy, and we had no further trouble with it till it had been carried over the eleven intervening marches to Srinagar, where it was

delivered to us on April 7th. McCormick, Eckenstein, Zurbriggen, and I, with Bruce's bearer, Rahim Ali, who was to be our chief servant throughout the journey, started the same afternoon in an ekka apiece.

The ekka is the ordinary one-horse, two-wheeled, springless native vehicle. It is a sort of hansom cab with a floor on a level with the top of where a hansom's doors are, and without any seat for the driver behind. The driver sits on the shaft or anywhere he can hitch himself in. The superstructure, above the floor on which one has to squat, con-



ROUDEBUSH STARTS IN AN EKKKA.

sists of a dome supported on four poles. Ekkas are never new, nor is the harness new. The thing seems to be tied together with string at all points; the strings are always coming loose, and the driver spends most of his time tying them up. When the wheels come off they have to be tied on with string wound about the end of the axle. The tires are fastened round the wheels with wooden wedges, which must be kept wet. If they dry the tire comes off. An ekka horse is a mere anatomy. He is born very old, but he will jog along for ever.

We doubled ourselves into our five ekkas, bade farewell

• to Bruce, who was to follow us in a few days, and started away about three o'clock in the afternoon. Bruce's dog, Pristi, who was to be our faithful companion, had gone on ahead with the Gurkhas and the mule-train. The road was good enough, but the heat of the sun oppressed us as we crossed the bare lake-basin, so often referred to. We were surrounded by fine hills, whose lower slopes were diversified with terraced fields, and patched with a few scanty trees. Beyond the level area we entered a



LOADING THE MULES.

complicated valley system, formed by intermittent streams cutting deep nasals into the alluvial deposits. These devious gorges we had constantly to descend into and cross. Most of them were dry. Whence they come, whither they go, the traveller in his haste cannot discover. Ahead were always the snowy hills we saw from the slopes around Abbottabad. The foreground presented much variety, and

the twisting of the road made constant changes in the view. We passed near two or three camps of Europeans engaged, I believe, in surveying for a proposed line of railway. In about two hours and a half we reached the crest of a gentle rise, and saw at our feet a deeper little valley than usual, and the picturesque village of Mansera climbing up its opposite slope. We passed the merry mule-train as we dipped down to the river, and, after traversing the populous and slummy street, we reached the wooded compound of the *dâk bangla*.*

Our first experience of these Indian rest-houses, so much abused, was decidedly favourable. We had the place to ourselves. The house was good, the rooms clean and sufficiently furnished. There were even books to read. There were armchairs in the veranda and a lawn in front of it. Tea was served a few minutes after our arrival, and then I wandered forth to enjoy the pleasant evening and the charming views. Before us was a low ridge covered with granite boulders and looking like a moraine.



RAHIM ALI.

Beyond it was another considerable old lake-basin. I knew that one of the boulders bears an Asoka inscription, and was all eagerness to find it; but no one could direct me to it, and my search was fruitless. There was clearly an ancient trade-route through the valley in remote times, and the inscription must be in the neighbourhood of the old road. On examination the granite blocks were proved to form no part of a moraine. They had merely rotted into boulder form

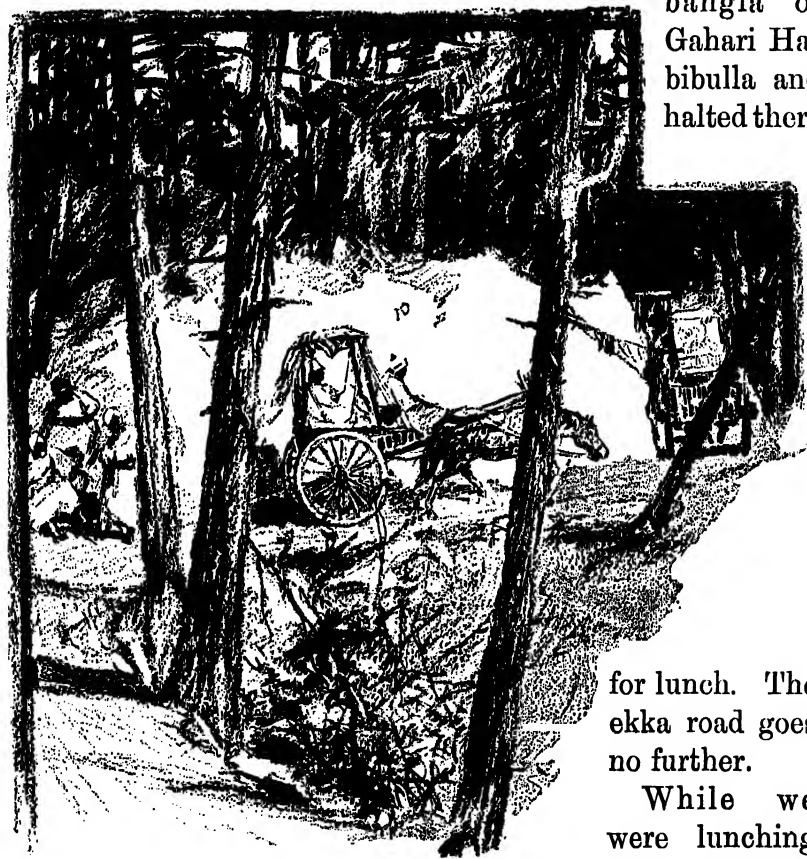
* A *dâk bangla* is a public post-house. There is one at the end of each march or *parao*.

in situ, just as they have done in the neighbourhood of the first cataract of the Nile. The tail end of a Panjab dust-storm came up towards evening and softened the landscape. It blotted out the bases of the further hills so that only their faint crests, in every grade of evanescence, appeared, not against but in the sky. When the sun set, faint glimmerings of pink on snow-slope and cloud were here and there revealed, concealed, and revealed again behind the dusty curtain. I walked back to the bangla through the green corn-fields and past a Moslem graveyard strewn with palls of white and purple iris in full flower. Before dinner we all sat under the veranda and watched the night come on.

March 29th.—When we started again in our ckas at 8.30 a.m., the air was still milky with the dust-fog, and the hills were blotted out. We crossed the granite ridge and traversed the slopes along the east side of the old lake-basin. The alluvium is here hundreds of feet thick and frequently cut down into deep nalas. Occasionally even the water-worn rock below it is revealed. A vast vein of quartz, some 40 feet thick, crosses the country, tilted up edgeways like a wall and supporting softer accumulations on its flanks. It thus forms a sort of fence of low hills, through which streams have broken their ways. Our journey was diversified from time to time by the breaking down of McCormick's ekka. All its prehistoric harness had been replaced by generations of bits of cord, and the last representatives of these were now rotten in their turn. The sun was less broiling than on the previous day, for the dust-fog took the anger out of it. After an hour or two the road began to mount over the hills on our right in order to cross the watershed into the Khaghan valley. We ascended amongst trees on the boulder-strewn slopes. The scenery improved and the trees increased in size. About eleven o'clock we reached the pass. The road on the other side wound down through admirably wooded valleys, in which the faint dust-fog still lingered. Flowers and shrubs

blossomed on every side. The woods consisted of a pleasant variety of trees. The descent was not unlike ways down into the Val d'Aosta. In about an hour and a half we crossed the foot of the deep Doga nala, and then, following theavenued road southwards along the bed of the Khaghan valley for about a mile, we came at one o'clock to the dāk

bangla of
Gahari Ha-
bibulla and
halted there



ON THE ROAD TO GAHARI HABIBULLA.

for lunch. The ekka road goes no further.

While we were lunching the coolies appeared, and ten

of them shouldered our baggage for the four hours' walk that the afternoon had in store. We had come into the Khaghan valley over its western ridge, and were now to get out of it over the eastern and descend into the Jhelam valley at Domel. Reference to the map will show that the shortest way to Gilgit would have been straight up

Khaghan * to the Babu Sar pass at its head, then down to the Indus and up its bank to Bunji. By this route Gilgit would only have been fourteen marches from Abbottabad. But the road lies through Chilas, which was then an independent robbers' state, where our lives would not have been worth an hour's purchase. Had we come a year later this route would have been opened. It is now pacified and secure. As it was we had no choice but to go round by the Vale of Kashmir and the new Gilgit road over the Burzil pass. There are two ways to Domel. I took one of them on the outward journey and the other on the return seven months later. Both command fine views.

We started at three o'clock. Crossed the new bridge and went away down the valley by a path along the left bank of the stream—a narrow footpath of native make, never flat, never straight, and never the same in inclination or direction for ten yards together. We followed it for some six or seven miles till we reached a deep-lying bend of the river. We now turned to the east up a side valley, and came to a spring of clear water. The nala led to a low pass on which we halted at six o'clock. This is the frontier between British territory and the kingdom of Kashmir. The view was superb. We were looking down into a deep basin within which the Jhelam made two noble bends. Mountains surrounded the grand enclosure, and a lower range divided it, enabling us to discover where Kishanganga and Jhelam join. Evening colours tinged the opposing Kaj Nag ridge, the ruddy substance of which grew purple above the shadows of the valley. This wonderful prospect, undergoing every change that purples, violets, and greys can combine to produce, was before us throughout our traversing descent. Down we went as fast as possible, first over slates, then over their alluvial covering, and lastly in the bed of

* I commend this valley to the attention of Anglo-Indian mountaineers. It is easily accessible, gives access to peaks of 18,000 feet, superbly placed for views and not too difficult, and offers a chance of sport as well as climbing.

the inevitable nala with precipitous sides cut deep into the alluvium. A winding, wandering nala it was, disclosing at every bend some new glimpse of sunlit peaks framed between the steep walls. We reached the fields at dusk, crossed the Kishanganga by a new bridge near Mozufferabad, and, leaving that place on our left, came in a few minutes to the fine Jholam bridge (since destroyed), slung high up over a gorge, and adorned with pavilions at either end. Crossing this we entered Domel, and found accommodation in the palatial dâk bangla (since destroyed) which stood by the meeting of the waters.

March 30th.—Domel is situated on the new military road which leads into the Vale of Kashmir from Rawal Pindi by way of Marri and Kohala. The road from Kohala was begun about the year 1876, and the first fifty miles were constructed in the following twelve years, the upper and more difficult portion not being commenced. The Government of India, considering the progress of the work too slow, decided on hastening it forward, and they accepted the offer of the energetic contractors, Spedding and Co., to finish it in two years and a half. The contract was approved by the Kashmir durbar, and duly carried out. The road is 18 feet wide with a ruling gradient of 1 in 50. The work on the upper portion was very difficult, owing to the extraordinarily heavy rock-cuttings required to get the gradient. Some of the cuttings are over 200 feet high, and expensive breast and retaining walls were necessary to keep the road up, in consequence of the avalanches which fall at many points between Chakoti and Barramula. From Domel to Barramula there are six marches: (1) To Garhi, 13 miles; (2) to Hatti, 10 miles; (3) to Chakoti, 15 miles; (4) to Uri, 16 miles; (5) to Rampur, 10 miles; (6) to Barramula, 13 miles. No tongas being available, we made the journey in ekkas in two days.

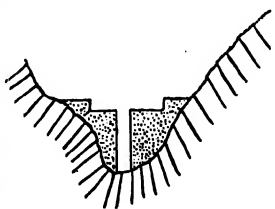
With much difficulty our ekka train was started by ten o'clock, but I had been out and about long before, sitting in the veranda behind a terrace of rose-trees in full bloom,

or in the pavilion at the end of a pretty pier that jutted out into the river, and was built by the Maharaja for the pleasure of travellers. It commanded a charming circle of views. You could look across the sweeping slopes of the Kaj Nag and the fertile terraced plain that spreads from their base and drops down to where Kishanganga and Jhelam meet, not more than a quarter of a mile away ; or you could gaze down-stream towards the cirque of hills into which we looked from our col the evening before. The water of the combined streams sweeps past you round the bend, smooth flowing and swift, then breaks into a thousand ripples over a steeper shallow, and thus, laughing gaily in the morning light, turns the corner, under an alluvial bank, and is gone for the hot plains and the hated sea. Logs were floating down it when we were there. Five months later its burden was to be the unburied and unburnt bodies of men, destroyed by the cholera.

When we started the sun was shining like an enemy ahead, and we felt his power, for Domel is only 2,000 feet above sea-level. The road follows the Jhelam fairly closely all the way to Barramula, only diverging far from it in three places. In the first hour we were greeted by a fine series of views, ennobled by the all-enveloping blaze of day. The light struck broadly over the sweeping buttresses of the Kaj Nag and dappled our side of the valley, making the young foliage of every tree transparent in green or red according to its kind. Below were the sinuous forms of the sunken river, and far ahead soft visions of larger hills buried in bright air. Nor were the details of the roadside lacking in charm ; now a picturesque peasant, anon some flush of ostentatious blossom, or butterfly displaying its glories of iridescent blue, flaming gold, or dappled grey. After a halt for lunch at Garhi we entered tamer scenery, till an encroaching side-ridge forced an ascent to a col in it, about half a mile south of the main stream. A series of cirques followed, and the highest point of the Kaj Nag appeared in front, white with snow. Above Hatti the

scenery was on a grander scale. The valley narrowed and the river flowed through a gorge, the road being cut in the steep face high above the water. We only passed one waterfall, and it was small, but beautiful in form and richly moss-embroidered. We halted for the night at the dâk bangla of Chakoti, planted on a jutting angle about 100 feet above the road, and close to the outlet of an old lake-basin. The house was old, and, I should judge, full of scorpions; at all events one fell from the roof of the veranda almost on to my head. All our bones were aching from the jolting of the springless carts, and our heads from the power of the sun, but a night's rest set us all right.

March 31st.—We started at seven o'clock in the cool morning air, and drove through to Uri before the sun gained power to annoy. I was always on the look-out for signs of ancient ice-action, but found none. Formerly the valley seems to have consisted of a series of lake-basins. These were filled, sometimes 1,000 feet deep, with immense masses of alluvium, brought down by floods and mud-avalanches, as the bedded structure shows. The river has cut, into this alluvium, a gorge of varying depth, according to local conditions. The normal valley section is as here represented. Where possible, the road follows the top of the alluvium, so that the characteristic view is of boldly sloping and rounded hillsides above, a dark gorge below, with a shelf or shelves of cultivable ground intervening between the two. Sometimes the sides of the gorge are not precipices, but slopes bearing a thick tangle of trees, through whose young foliage the sunlight played as through stained-glass windows. The gorge winds about in majestic curves, and when the eye can plunge down into one of these, and can also be raised to some fine peak above, there are the elements of remarkable views.



The longer reaches of the river follow the strike of the strata. Shorter reaches cut through the strata at right

angles to the strike, thus maintaining in this region of lower hills the habit of Himalayan rivers through all the higher ranges. The bones of the mountains here consist of a dark, hard, rather impure limestone, with indications of cleavage, in beds usually about 40 feet thick. The flesh is formed of thicker alternating beds of a softer, purplish red, slaty rock, which is more easily eaten away. In some narrows, about five miles below Uri, a wall of the limestone has been cut through by the river. I have called it a wall, because it looked like one. It was a compact stratum heaved up edgeways, and just at right angles to the direction of the river. The waters and the weather have sloped away the face of the softer rock, but contented themselves with removing a minimum of the harder, so that it now stands like the piers for some fallen-in bridge.

In a wild and rocky angle near this spot was the flag-bedecked shelter of a fakir. It consisted of some stone walls breast high, with a roof supported on posts above them. The man's head appeared over the wall, and his boy crouched at the door. His face bore the impress of mildness, piety, and perhaps madness. The *ekka walas* gave him of their coppers, and received his blessing and lighted charcoal for their pipe, nor deemed themselves defrauded. One fellow told me that the fakir's words warmed the cockles of a man's heart. The bit of a hut, hitched in amongst precipitous rocks, between the roadway and the deep, and bright with little red flags—*not* of liberty—was a picturesque addition to the landscape, and well in keeping with it.

Zurbriggen did not get himself blessed by the fakir, and soon found out his mistake by an accident, which fortunately happened where the road was flat and bordered by meadows a few feet below on either side. His machine toppled over, so that horse, driver, and Zurbriggen all rolled in a confused heap together into the field, with the crazy ruin on top of them. Various Swiss expletives arose from the wreck, but presently Zurbriggen emerged uninjured.

The road sweeps in a fine curve up to the high-placed serai of Uri, which stands on the brow of a step in the valley, and can be seen from afar. The dāk bangla is a short way behind the old serai, and there we halted for breakfast. Uri occupies the site of a very ancient city, and there are ruins and sculptures in the neighbourhood.* At Uri the Jhelam river comes in by breaking its way through from the north, the true head of the valley we had thus far followed being the glen which leads to the Haji Pir pass, and over to Punch. During the next stage of the journey, therefore, we were confined within a region where the struggle between water and rock was more energetic than before, the river as often cutting across as flowing along the strata, making the scenery more varied and



TEMPLE OF BHANIYAR.

magnificent. Before reaching Rampur, where we stopped an hour for lunch, we passed under a precipice dignified by the vertically ruled lines of stratification and their upward prolongation into a fringe of mighty firs on the steep slope above. The road led by some pleasant copses, and over a meadow at the mouth of the pretty Harpatkai nala;

* See a paper read before the Royal Asiatic Society by Dr. Stein, Nov. 14, 1893. This paper also contains the most recent notes on the ancient ruins in Kashmir.

it then took us through a wood along the flat alluvial shelf in a narrow part of the valley.

In this romantic spot stands the well-preserved and ancient temple of Bhaniyar. It is a good example of the interesting series of pre-Mussulman Kashmiri temples. They are all of this simple type—a courtyard, entered by a massive gate-pavilion, with a shrine standing isolated in the midst. The character of the parts is sufficiently discoverable from the illustration on the previous page. Some of these temples are believed to date from the very beginning of the Christian era, and the sculptures found in connection with them show the influence of the Gandhara school. The imprint of Western classical traditions upon this style of architecture is unmistakable. The ordinary North Indian type of mosque, with its cubical entrance pavilion and its colonnaded courtyard, is doubtless connected with this earlier type of religious edifice; both at any rate descend from the same common ancestry, which is easily discoverable in the historic regions between the Persian Gulf and the Mediterranean.*

Above the temple the valley became more open, and was delightful with the luxury of blossoming trees, fertile meadows, and a general aspect of well-being. Log huts, that might almost have been Swiss, replaced the stone-walled hovels of the lower country. The slopes were gentler and better clad with earth and *débris*. There were no more rock sections. The alluvial valley bed, wider in extent, was divided into little fields, terraced a few inches one above another for irrigation purposes. The water was upon them, and reflected the evening lights from the opposing hills. The most beautiful lake-basin of all had

* For the high porch and courtyard endless ancient Mesopotamian and Assyrian examples might be cited, such as the Palace of Sargon at Khorsabad. The elevated shrine in the midst of a courtyard, which may have always been, and certainly sometimes was, filled with a pool of water (like the modern Golden Temple at Amritsar), bears a remarkable resemblance to the Phœnician Maabed at Amrith, described and figured in Renan's "Mission de Phénicie," pp. 62-68, plates viii. and x.

yet to be traversed. Low striking sunlight lay like a fesse across it, and made its poplars and other trees glisten against the darker slopes. The flat ground was covered with iris plants not yet in blossom. Just as the evening closed in we were led, by one more cutting of the river across the strata, into the last reach. It is a stately avenue of entrance to the fair Vale of Kashmir. As we approached Barramula there was still light enough to show faint visions of snowy peaks rising from the far side of the plain. The river, no longer a tortured torrent, was flowing silently beside us. A line of storeyed houses, with laden barges beneath them, stretched for a mile along the further bank. The road was smoother, and our progress became peaceful. But peace was rudely interrupted when we came to a halt in the midst of a howling mob of chit-waving* boatmen, clamouring to be hired. In half an hour the turmoil was over; the ekkas were dismissed, boats engaged, the baggage all stowed, and ourselves punted away from the landing-place and moored in a quiet corner. Then indeed we realised what rest was, with the soft rocking of the river, the cool breeze of night, and the lapping of ripples on the shore; whilst overhead, in the silent sky, the old moon slept in the young moon's arms, and Jupiter blazed beside them, the brightest jewel of the heavens.

April 1st.—The Vale of Kashmir is an old lake-basin, drained almost dry by the cutting down of the rock barrier which formerly existed at Barramula, and through which the Jhelam now flows. The Wulah Lake is the only remaining portion of this ancient sheet of water. The vale is shut in on both sides by branches of the Himalayas, that to the south being the Pir Panjal range, whose southern front we saw from the railway near Rawal Pindi. Over the northern range lay our road to Gilgit.

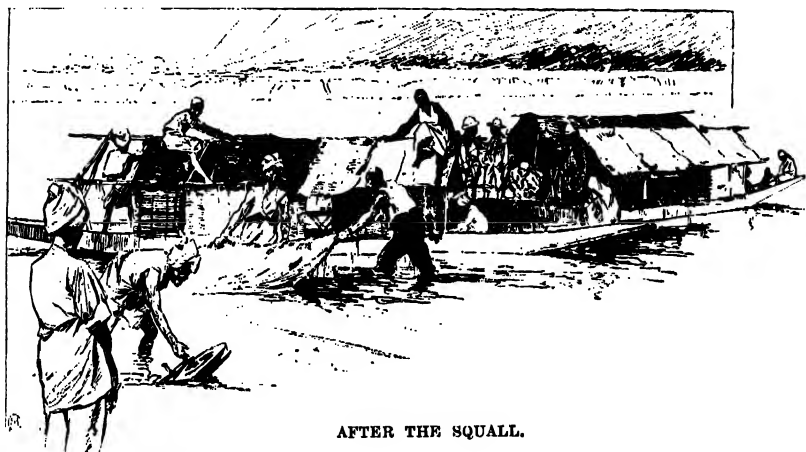
* A "chit" is any kind of letter, character, or testimonial. Every native's ambition is to be possessed of a quantity of these, which he produces and tries to add to on every possible occasion.

• Our boatmen, Sobhana, Gofara, and Aziza, with their families and men, were early at work, and towed us up-stream at a leisurely pace. The neighbourhood of the river might almost have been Holland—smooth water, steep mud banks, a fair bordering of trees, sufficiently like elms to deceive an unobservant eye, here and there a village, and here and there a barn, cattle grazing in the fields, and a boat or two drifting down-stream—such simple elements of peaceful landscape are common in many parts of the world. But what was not common was the encircling chain of snow-clad hills visible all around. Behind was the gateway of the vale through which we entered—a blue hollow, cut deeply back into the hills and having the mass of the Kaj Nag for northern side-post. The scenery was finest when we had left the river and entered the Wulah Lake, three sides of which are enclosed by such mountains as look down upon the Lake of Uri. As the sun was setting, its beams seemed to flow like liquid fire into the vale through every western passage; and the sky was all aflame with wreathed clouds, that carried up to the very zenith the splendours of the west. We were in a mere daze of helpless delight, knowing that neither brush nor pen could avail to depict one thousandth part of what each glance conveyed.

April 2nd.—I know not at what early hour the boatmen started from Naid Khai, the village by a canal's bank where we tied up for the night. This canal was a short cut leading from the Wulah Lake back into the Jhelam, a little way below Manasbal. The day was dull and cool and misty, the mountains being scarcely visible save as a faint suggestion under the clouds. In the afternoon we passed the mouth of the Sind valley down which we were to come, six months or so later, on our return from the highlands. Towards evening we approached Srinagar, and looked forward to a pleasant dinner with Roudebush and Dickin, but the fates had otherwise ordered.

Our boats were the usual flat-bottomed Kashmiri punts,

with roof and walls of matting supported on a gable-ended framework of posts. The hanging side-mats can be rolled up to enable the voyager to see the views or feel the breeze. It so happened that a squall suddenly sprang up, and one of the boats lay broadside on to it. For a moment it seemed as though it would be blown over, but something giving way, the heavy matting roof and walls were lifted bodily off into the air and cast into the water, carrying a kilta and spinning-wheel with them. Then arose crying and confusion amongst the natives in the after-part. An old hag lifted up her voice and wept, partly for her spinning-wheel, but more because of the scolding she got from her



AFTER THE SQUALL.

sons for bad steering, for she was at the stern paddle. Rahim Ali was at the time on shore, but he promptly boarded the wreck, stowed all our loose things together under a blanket, and calmly went on cooking, with a grin on his face and observant eyes turning all ways at once. A small girl and her blind sister landed during the tumult, and the little one plucked a nosegay of yellow flowers which she archly presented to one of us. Sad it was to see the blind maiden carrying the baby about, and feeling her way down the precipitous mud-bank to the narrow shore. Not for her were the sunset glories which the heavens now revealed between the storms. The piled majesty of the



THE MUNSHI BAGH, SRINAGAR.

CHAPTER III.

IN THE VALE OF KASHMIR.

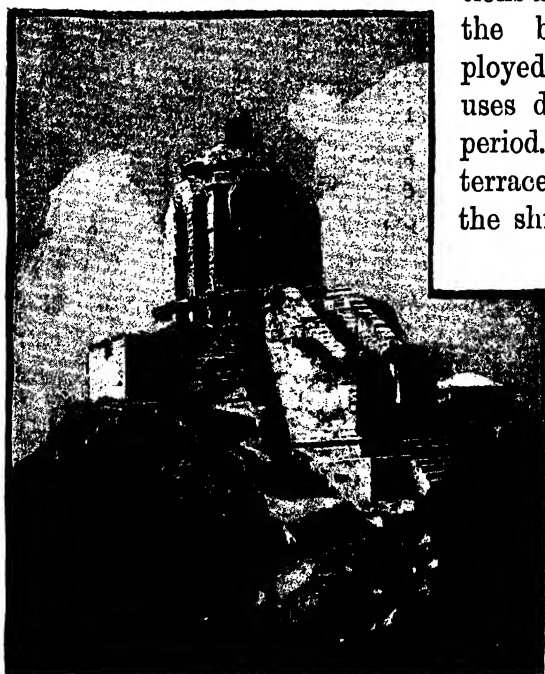
April 4th.—The Munshi Bagh lies on the right bank of the river Jhelam, at the foot of the hill called Takht-i-Suliman. Before breakfast we made the ascent of this hill to the temple on the top, reputed to be the oldest building in Kashmir, but probably, in its present form at any rate, built in Mussulman times. The view from it cannot but be fine, for the vale spreads abroad on one side, and the Dal Lake is on the other, with mountains rising from its further shores. The town of Srinagar is spread about between lake and plain. The river winds in serpentine curves at one's feet, before stretching backwards with definite intention towards the hills of its origin. When we arrived, the ring of distant mountains was already dissolving into the bright Athenian mist, which seems to be as frequent a feature in the sky of

Kashmir as of Greece. The little shrine has lost its original roof and has been patched about at various dates, the gate and steps leading up to it being comparatively modern. There are remnants of other buildings near, which would repay excavation. The door of the shrine was locked, but we climbed in over the top. The existing roof is supported on two stone beams carried by four eight-sided pillars, cut from square or rectangular piers. The capitals of these pillars have been restored with cement, and one cannot see their original form. The four pillars stand at the angles of a square stone platform, in the midst of which is the lingam. This is made from the rock of which Martand is built, and is placed in a kind of stone saucer for carrying off the oil wherewith the faithful anoint it. The interior of the building is circular on plan. The triangle-headed door is in the east side. There are rough Arabic inscrip-

tions about, showing that the building was employed for Mussulman uses during the Moghal period. An eight-sided terrace, which surrounds the shrine, is bounded by

a stone parapet, whose inner face consists of a series of small round-headed recesses, apparently for sculpture, depressed within oblong frames.

We had much work to accomplish during the day, but in the



TEMPLE ON THE TOP OF THE TAKHT-I-SULIMAN.

afternoon I found time to walk with Dickin through the col between the Takht-i-Suliman and the last of the hills, and so down to the Dal Lake. The views were lovely over the water and the slopes of the mountains in the soft grey afternoon. All things far off were lost in mist. Many of the fresh green trees about us were bright with blossoms. We ultimately turned out of the road that runs by the lake, and mounted through vineyards to the Chashmah Shahi, a Moghal garden of the usual Persian type, with a spring of clear water and pavilions about it. In the garden, cherries, apples, pears, plums, and lilacs were all in bloom, and framed the most charming vistas of lake, hillside, and plain. The simple native gardener showed us round, and seemed to enjoy our pleasure. A black pet lamb followed him everywhere, even to the upper storeys of the pavilions. When the subdued light of evening was playing magic with the dainty views, we turned our steps homewards. McCormick, Roudebush, and I slept on the boats preparatory to an early start up-stream the following day.

April 5th.—We did not awake till our boat had been for some time on its way, and had passed most of the long loops which intervene between Srinagar and Pandrethan. The remainder of the day we were content to lazily loll in the boat, or stroll along the bank with a gun, to which now and again a wild-duck was good enough to fall. The shining haze hid from us the distant hills; but towards evening the crest of the Pir Panjal became visible as an ethereal apparition behind the veil, and, later, was cut out in dark silhouette against the silver sky. Towing continued far into the night, and we were fast asleep before the boat came to off Islamabad.

April 6th.—After an early breakfast we walked through the outskirts of the town, and along a field-road. In about half an hour we began mounting to the right, and swiftly attained the level of the upper valley plateau (one of the *Karewas* of Kashmir). We crossed the bare flat for about an hour to the foot of the slopes, where,



MARTAND.

just on the hem of the skirt of the hills, stands the famous ruin of Martand, looking purple from the distance in the grey day. The Pir Panjal could be seen outlined against the sky, but the plain vanished into mist at our feet.

The temple is of the usual Kashmiri type—a shrine in a court. The shrine in this case has been added to at various dates, and stands behind the transverse middle line of the enclosure, which is not square, but oblong. The enclosure is surrounded by the usual series of cells built against the wall. It was entered by a chief portal on the west, and there appear to have been two minor portals (or perhaps only larger cells) in the middle of the side walls. They were one course higher than the rest of the enceinte. The whole is built of the local blue limestone, in which are many red veins. The temple itself consisted originally of a single shrine of the usual type, with a stone roof imitated from thatch. It appears to have been open on all four sides, or at least on three sides, the openings being large and trefoil-headed. The building may have shown signs of weakness at an early time, and was strengthened with a stone wall lining on three sides and part of the fourth, which thus blocked up the side openings and narrowed the front one. A pronaos was afterwards added, in keeping with the rest, and two separate little shrines were built in alignment with the new façade, near, but not attached to it. Each of them was double, and contained an elevated open shrine facing to the front, and another to the rear. The whole was at some time shaken into ruin, possibly by an earthquake. The building is formed of horizontally-bedded stones of rather large size. The trefoil-headed arches are false, being merely cut out of the horizontal courses. The later additions to the lucid original edifice seem to correspond with some change of ritual. The sculptured decoration is almost destroyed; it was contained within trefoil-headed frames enclosed beneath triangular pediments. All the sculpture on the naos is

confined to the eight angle buttresses, and may not be so old as the building.

Mounting a short distance up the hill behind, one gets a picturesque view of the ruins projected against the Pir Panjal. They are not to be reckoned amongst the great ruins of the world; they are not comparable to a small Egyptian temple (such as the small temple, say, at Medinet Abu), nor to an English abbey. To mention them in the same breath with the Parthenon is absurd. In situation they are doubtless remarkable. On the last dip of a hill-side, a hundred yards before it spreads into the upper level of the Kashmir plain, and with the snow-capped range around them, they enjoy an exceptional advantage. It must, however, be remembered that the Pir Panjal is itself third-rate as an example of mountain form. Most of it is as flat along the top as the ridge of a roof, and the remainder is merely serrated into teeth, pleasant, indeed, by comparison with the level crest, but poor by the side of even ordinary mountains. The peaks, seen between south and east as one approaches the ruins, but not visible from them nor from most of the vale, are finer in form. After all, Kashmir is not comparable to the Italian lake district for natural beauty. It is a country in which Nature awaits the help of man. The views become admirable when employed as backgrounds for architecture, or at least horticulture. Gardens are needed to enframe them, pavilions to command them. But Nature at once accepts and blesses such works of man, and the commonest painted wooden erection, if of good proportion, looks finer amongst the orchards by the Dal Lake than palaces of marble could appear in London. Pour the wealth of a metropolis into Kashmir, and you might make a paradise impossible elsewhere.

We descended direct to the plain, and visited a modern Hindu temple, with the usual pool full of sacred fish. In the lingam enclosure there was a fine fragment of ancient sculpture—the lower half of a female figure seated on a lion, with one knee drawn up—as good as anything I

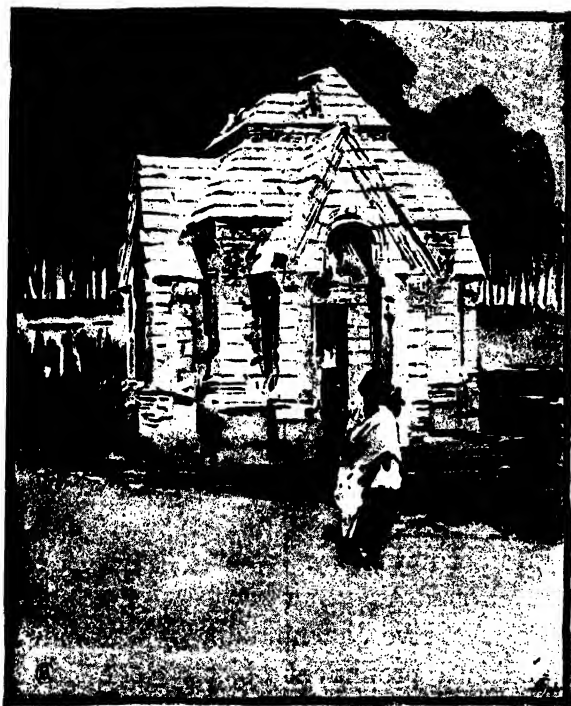
saw in India. Faint with hunger, we struggled back to Islamabad, and visited two Hindu temples that presented no points of novelty. We hastened from them to the boat, and at once started away down-stream. The day closed calmly; but at night the storm, which seemed to have been brewing for weeks, burst upon us in thunder, lightning, and a deluge of rain. We moored at a late hour off Avantipur.

April 7th.—The morning was cold, wet, and windy; but we were able to land between the showers, and to visit the two ruined temples. Both appear to be later in date than the oldest part of Martand, but possibly contemporary with the pronaos. The porch leading to the enclosure of the upper temple, which is named Avantiswami, was flanked by wings of some sort, supported on columns, which stood on the roof of the cells. The remarkable feature is the quantity of decoration applied to flat surfaces, mouldings, and the pilasters supporting canopies above the trefoils of the cells. What remains of the sculpture is better than at Martand, but does not rival the decorative detail. The enclosure appears to have been oblong, and the shrine to have stood in the midst of it; but this has fallen into absolute ruin.

The second temple, named Avantiswara, is situated about a mile further down the river. The bulk of the porch remains standing, and is a prominent object. The lintels of its front and rear were carried on a pair of columns, as at Bhaniyar. The sculptured decoration was never finished; much of it was only roughed out. The ruin of the central shrine is a complicated heap. It appears to have been the most elaborate in Kashmir, consisting of a central chamber, with a projecting porch on each face, and a pair of small chambers at each angle, the whole planted on an elevated base. The decorative details were rich, the mouldings numerous and deeply cut. The temple was probably the latest in date that we saw. Its position between the river and an advanced hill is magnificent. Sombre thunder-

clouds and a threatening sky added to the effect of the landscape.

Another storm sent us back to the boat, and once more down-stream. When it cleared off, the wild-duck were for a time approachable, and a few were secured as we went along. About four o'clock we quitted the boat at Pandrethan, leaving it to meander round the bends whilst we



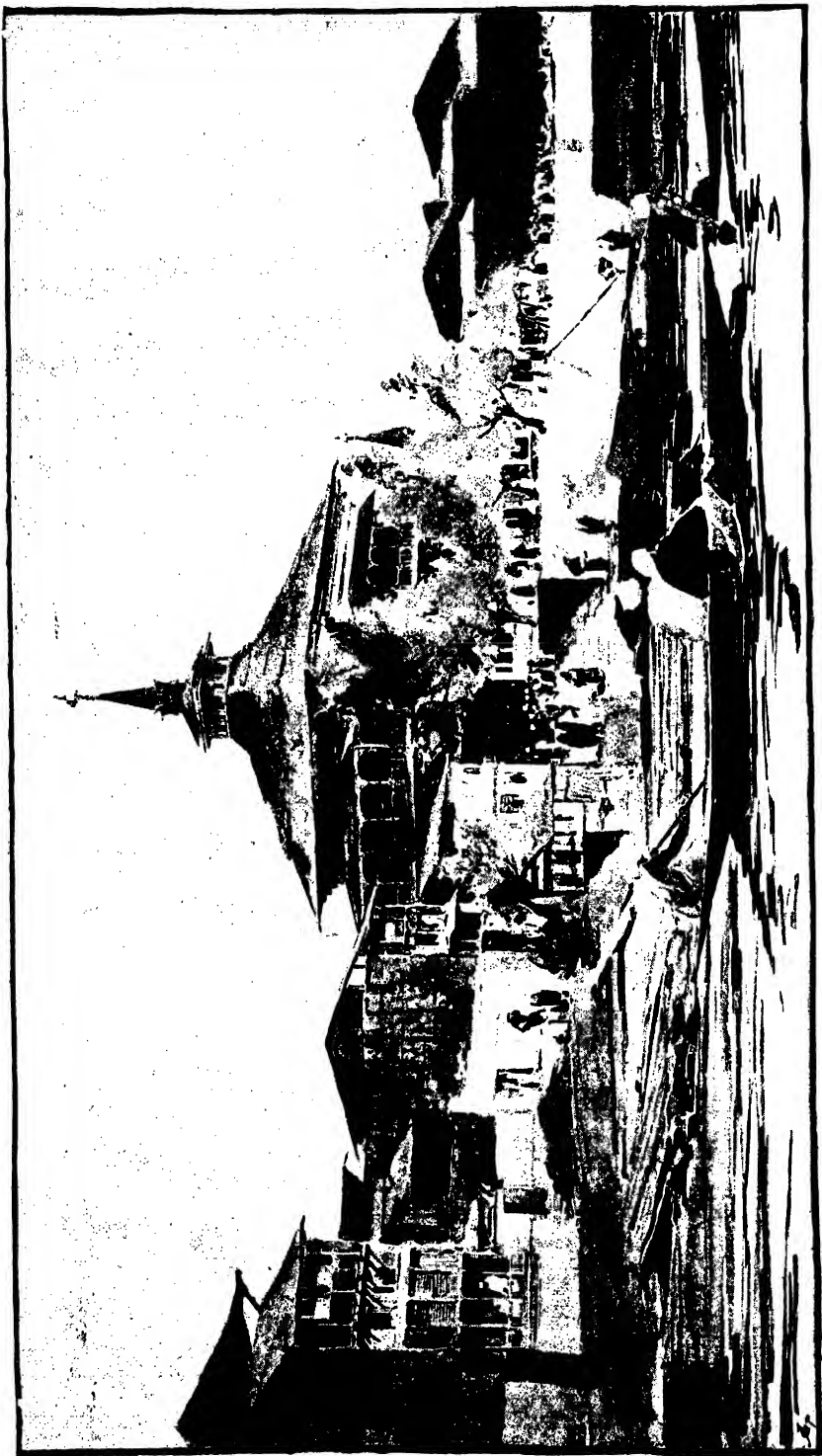
PANDRETHAN.

visited the temple and walked to the bangla.

The shrine of Pandrethan* is one of the most perfect, but by no means the most ancient in Kashmir. The enclosure is gone, but its position is marked by the pool of water in which the shrine stands. The shrine retains most of its original stone roof, and proves

that, however much the details of pilasters and mouldings may have been suggested by Western traditions, the actual form of the building was a copy in stone of a type of edifice previously developed in wood and other perishable materials. The ends of wooden beams are imitated in

* It is oriented 23° south of west. Martand and the two Avantipur temples face from 5° to 15° south of west. The door of the Takht-i-Suliman faces in the contrary direction, 10° north of east.



SHAH HANADAN MOSQUE, SRINAGAR.

stone, and the slopes of the roof are decorated with the blind similitude of dormer-windows. The four façades resemble one another; over each is a large pediment above a trefoil-headed recess, within which is another pediment and smaller recess, originally containing a seated figure in the attitude associated by Europeans with Buddha. One of these figures still remains—a rare chance. There is a decorative frieze under the eaves, apparently consisting of a row of arch-headed niches, each of which may have held a small seated figure. Behind the temple on the hillside are scanty remains of an ancient city.

We walked home in time to escape yet another downpour, and were pleased to find, on our arrival, that the baggage had come in, and was ready to be finally repacked.

April 8th to 10th.—Most of the work of packing devolved upon Eckenstein, as had been the case in London and at Abbottabad. He accomplished the undertaking well, and nothing was broken. The things had now to be taken out of the cases they came in, and to be recatalogued and deposited in leather-covered baskets, or *kiltas*,* the ordinary coolie packs of the country. Twenty-six *kiltas* and six other pieces of baggage had to be prepared and handed over to the Kashmir authorities to be sent by way of Skardo to Askole, there to await our arrival. The apparatus of civilised life was to be left behind at Srinagar. All else was to come with us. A load was not supposed to exceed 50 lbs., so everything had to be weighed. A quantity of stores remained to be bought, and we were all busy enough. Every day I had to go down to the shops in the town to make purchases. Sometimes it was to Samad Shah's over against the great mosque, sometimes to the New Bazaar.

One day we went into the mosque of Shah Hamadan, the type of all later up-country mosques. It is wholly built of

* *Kiltas* are generally made in a roughly cylindrical form—the worst shape for packing into. A traveller will be well advised to have them made of the ordinary box shape and somewhat larger than the regulation size. He should get these for from 2 to 2½ rupees each.

wood. From a courtyard, surrounded by a two-storeyed portico of excellent proportions and carved decoration, we passed, amidst a crowd of apparently not unfriendly onlookers, into the mosque. Few buildings produce a more soothing and agreeable impression. The subdued light enriches the dark-toned wood wherewith the interior is wholly lined. Walls and roof are intricately panelled, though the ceiling is only here and there visible between the coloured canopies that hang from it. Four great decorated wooden columns support the roof. Their capitals are foliated and resemble the palm-leaf capitals of



THE MAHARAJA'S PALACE FROM THE JHELAM, SRINAGAR.

certain Ptolemaic columns. The wall panels are tastefully carved or inlaid. In one corner is the saint's enclosure, and beyond it a door decorated with engraved looking-glasses, the only tawdry thing visible. The exterior with its porticoes and porticoed balconies, its well-proportioned roof and charming central spire, is the most elegant piece of architecture in Kashmir, and one of the most elegant I have anywhere seen. It stands well by the river bank, and makes the Hindu buildings ridiculous by contrast.

We cannot take leave of Srinagar without mentioning the picturesqueness of the so-called New Bazaar. We went

down to it by boat one afternoon, and, landing on the right bank, ascended a flight of steps and entered a narrow passage with shops on either hand. Craftsmen were working in the open rooms on the ground floor; most of the shops were upstairs. We were at once surrounded by a crowd, crying, "I sell you this!" "I make you this!" "Come and see my worrrk!" "You not buy from me; you buy from other man; see my things; I do good worrrk; this is my shop!" and so on. We climbed crazy stairs and entered a small room wherein were tables covered with silver, copper, and brass inlaid with gay enamel. The dealer and his friends stood or squatted around; no one in particular seemed to own the shop. There were some rude paintings and a diploma from the Colonial Exhibition on the wall. Tea was at once served. Where should they put the milk? The first silver bowl that came to hand was good enough. A harlequin set of Chinese cups were produced. In pouring out the tea they upset most of it. The sugar was like biscuit, but sweet enough. Then they produced their curios. Everything unusual was said to come from Yarkand; Bokhara was second favourite, then Badakhshan. They demanded at first extortionate prices, and backed their demands by showing their everlasting book of chits, containing the prices supposed to have been paid by other sahibs. As the things became strewn about the room, picturesque effects were produced. We visited the *papier-maché* man, and noticed that English purchasers were steadily ruining his art by preferring his worst designs. He thought to capture us with one in particular. "Last year I sold great many of these, every gentleman one pair, two pairs, mostly devil pattern—I sold great many devil pattern—devil pattern very much admired." Thus do the English befoul the world's art. They all took an embarrassing fancy to my stylographic pen. "I like this pen; you give me this pen; I show it to gentlemen, and I show your name; then your name go best."

When the light became dim indoors we started to return.

How wonderful was the coming out ! From the top of the bazaar steps we looked down the dark, narrow street, full of men, across the river and away to the distant mountains on fire with the sunset. A rich haze of blue wood-smoke enveloped everything, for it was the month of Ramadan, and the cooking of the evening meal was a more important matter than usual. A few steps forward, and the views opened up and down the river, now for the first time seen by us in its true splendour. All meanness of detail was blotted out in the wondrous haze and evening glow : up-stream the nearer hills with the moon rising over them ; down-stream a bridge and the orange west flaming above and below it. The sight even stilled the noisy crowd for a moment, and all gazed at it in silence. As we glided over the waters the moon took its sceptre from the sun, and the whole city became etherealised. The houses seemed of a gossamer fairy substance, and when we reached our bangla in the night the long lines of poplars lay black upon the silent stream.

April 11th.—This day Dickin invited us to a picnic on the Dal Lake. It was one of the red-letter days in the calendar of our journey. Starting in boats from the Chinar Bagh, we paddled up umbrageous reaches of the narrow stream and entered the water-gates by which the lake can be closed, then glided along pleasant canals, all alive with boats full of folk going a-holidaying (for it was the Hindu New Year's Day). A contrary stream of peasants was bringing vegetables and garden produce to the city market. Every view was charming, and all the air was sweet. Ducks animated the surface of the water ; flowers fringed the low banks, along which cottages alternated with clumps of pollarded willows, lines of poplars, and orchards of blossoming fruit-trees. We passed a village or two and a Hindu temple with glittering roof ; then under an old bridge showing its ragged bricks naked to the sun. Presently the water-way widened and our men forced the flat-bottomed craft with bolder stroke over the calm lake.



ON THE DAL

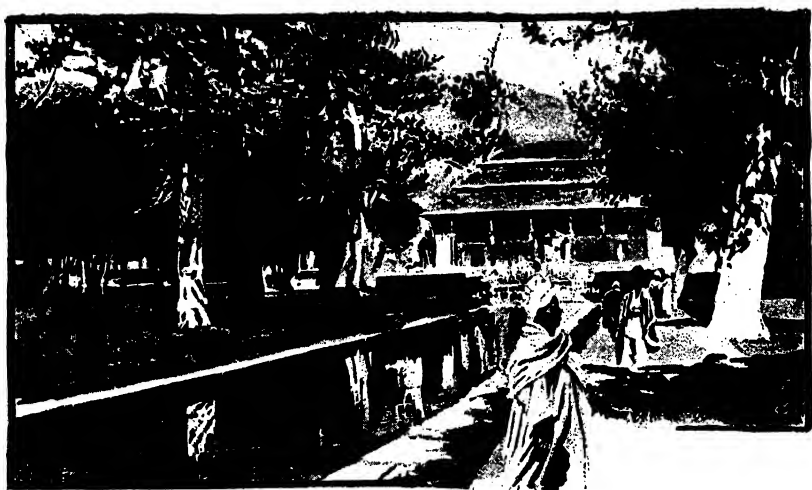
Floating fields, moored to the bottom by stakes, replaced the canal banks on either hand. It was delicious to lie and silently watch the hills mirrored in the lake and the band of fresh green between them, or backwards to look over the line of trees to mountains blue as the sky crested with snowfields bright and ethereal as clouds. The water gurgled beneath the rhythmic stroke of the paddles, which was now quick and gentle, anon, after word of command given, slower but stronger, and making the boat advance by bounds with a pleasant quiver through all her frame. There were lotus plants floating in the water, and the paddles of the boats we passed twinkled in the sunlight.

We landed at Hazratbal Mosque, where the Feast of Roses was yearly held, at one of which Jehangir and Nur Mahal had their lovers' quarrel. Steps lead up from the lake to a green square, shaded by chinar trees, beyond which is the two-storeyed façade of the mosque. The larger part of it is an addition imitated from Shah Hamadan, but behind is the original stone building, a small chamber of graceful proportions and simple but good decoration. The pattern on the ceiling is akin to that of some old carpet designs.

A short row carried us to the Nasim Bagh, an enclosure planted with well-grown chinar trees, which we were to revisit under other circumstances that day six months. Like all the parks and gardens around the Dal Lake, it was planted by the great Moghal Emperors of Delhi, whose summer resort was Kashmir. A row across the lake, past the Island of the Four Chinars, where once a temple stood, brought us to the mouth of the narrow canal that leads to the Shalimar Bagh. We had to make our way up it along with many more boats. The natives in them wore their whitest robes and gayest turbans. They seemed thoroughly happy and offered us lilacs and other flowers.

The plan of the Shalimar gardens, like that of the Chashmah Shahi, resembles the design of many Persian

carpet.* Water from a fountain flows down the midst of it in a stone bed, which is frequently broken into slopes, with the face of the stone so engraved that the rushing water is shivered into a patterned fabric as of crystal. The stream is conducted through, or round, a series of pavilions, and many jets of water dance about them. There are also pools in which bathers might frolic. Paths, parterres, and trees are symmetrically arranged beside the stream and about the pavilions. In an upper chamber in the highest pavilion, the secret place of Nur



THE SHALIMAR BAGH.

Mahal's pleasure,† carpets were spread, and lunch was served upon the floor. The view from the window extended over the garden and the lake to the snowy hills. Surely they must have been set in their place by the man who did the landscape gardening in Kashmir. The maker of mountains obviously built most of them to be climbed, but the Pir Panjal is useless for that purpose. Its use is purely æsthetic, its ridge a mere foundation for the sky ; the snow-

* See an illustrated article by the author in the *Art Journal* for December, 1891, p. 871.

† The Taj Mahal at Agra is Nur Mahal's tomb.

fields upon it are fine-weather clouds, and the slopes below a canvas for the sun to paint on.

When the whim took us we returned to the boats, as the sun was lowering to the west, the plain darkened by the shadow of the clouds, and the hills dressing for the evening pageant. The sun had not set before we again landed through a crowd of holiday-makers to mount the many-terraced Garden of Bliss (Nishat Bagh), which has a stream, parterres, and pavilions like the rest. We stayed there but a short time and put out again into the lake as the sun was



ON THE DAL LAKE.

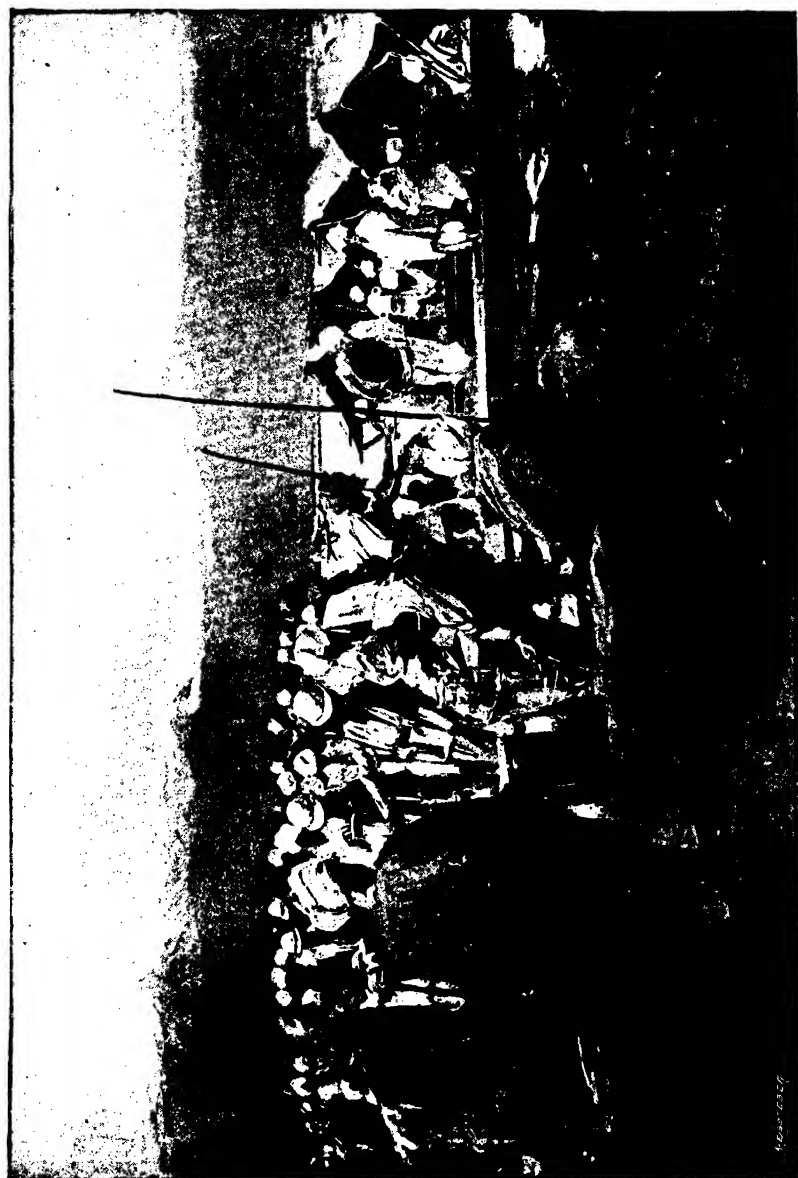
departing in a blaze of glory. The hour of colour came on—the hour of Kashmir's pride, when her battlements are outlined against the wondrous sky, and cloud-flags wave above their crests. The boatmen started against another returning punt a merry race, which we ultimately won amidst much polyglot chaff. As we approached the Takht-i-Suliman the night enveloped us and draped the mountains with a purple darkness, full not of gloom, but peace, which the brightly rising moon emphasised rather than dispelled. On reaching the bangla we found that Bruce had duly arrived.

April 13th.—The whole of the 12th and the morning of the 13th were devoted to packing. The Askole baggage was then ready to be handed over to the Kashmir authorities, who provided me with a *parwana* and all needful documents. After completing our preparations we fêted our approaching departure with a ceremonious dinner, and drank success to the expedition in the rather indifferent wines of Kashmir. Immediately afterwards we went on board our four boats with the three Gurkhas and the five servants. A few minutes before nine o'clock we began drifting down the river in the still moonlight. We were all



GOING DOWN THE JHELAM THROUGH SRINAGAR.

in fine spirits, scarcely harmonious, however, with the mood of the night. We sang, too rowdily, I fear, the poplar avenue having to echo back the strains of "Ta-ra-ra-boom-de-ay," and I know not what other ribald ditties. Parbir excited the envy of his comrades, Lila Ram and Amar Sing, with "Two Lovely Black Eyes," which he picked up in England. Zurbruggen contributed his native jodel to the general din. Our enthusiasm wore itself out as we entered the city. Lila Ram summed up his impressions of Srinagar in a brief sentence, "A good big place, but damned dirty." Parbir remarked, "Me, Nepal, say, Kash-



THE START FROM BANDIPUR.

mir woman good, Kashmir house good, Kashmir dirty." By the moonlight, however, the dirt was not visible. The mosque of Shah Hamadan, around which natives were singing, arose stately against the sky. Lower down, the steep, metal-plated roofs of the five towers of a Hindu temple shone like silver as we passed. But soon all the bridges and the town were left behind, and we were in the open country between the sky and the sky-reflecting waters. I lay on my side, with head raised by a pillow above the low gunwale, watching the panorama pass, as the stream bore us silently along. At what time the visionary landscape gave place to the world of dreams I know not; the reality was already dreamland.

April 14th.—When we awoke in the flat country near Manasbal the whole valley was roofed with clouds resting on hills of an intense blue colour. Only in the west a broad snowfield caught the sunlight and shone with startling brilliancy. As the sleepers awoke they began to call to one another from boat to boat. Parbir and Zurbriggen exchanged chaff in such English as they possessed in common, and sang snatches of English songs. The four boats drifted down together in all attitudes, and there was a constant passing and repassing from one to another as our morning calls were paid. About nine o'clock we entered the Wulah Lake, and there the boatmen worked their best, for they fear storms, and the waters were, at the time, quite calm. The passage to the northern shore only took three-quarters of an hour. We exchanged the lake for a narrow canal, and tied up at the landing-place for Bandipur, where 120 coolies were awaiting our arrival. They loaded up our goods at once and started off with them for Sanerwain, a village some four miles away, whence our regular marches were to commence. I finished my writing, paid the boatmen, and followed the caravan about three hours later. The actual foot of the first hill was covered with masses of iris, humming with bees. After brushing through them and passing massed blossoms of the larger sort, in

glory of purple and white, I came to the beginning of the new Gilgit mule-road, and, in an hour, reached the camping-ground of Sanerwain, where the Gurkhas were struggling to set up our tents, the form of which was new to them. There was a mud-walled bangla close by, and as the night promised to be wet we preferred sleeping under a roof when the chance offered.

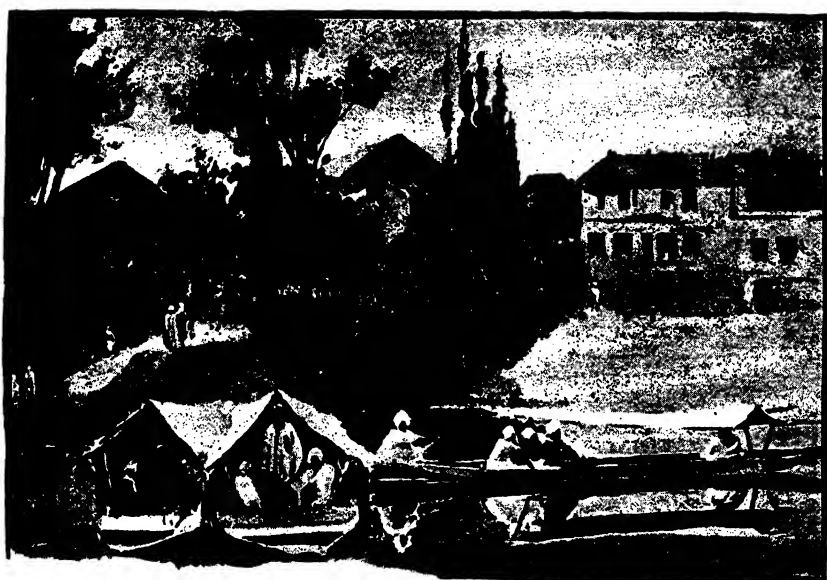
There were six tents in all—to wit Roudebush's 80-lb. Cabul tent, a glorified form of the same thing belonging to Dickin, and two Whymper and two Mummery tents for the mountaineers. The Mummery tents were of the form described in the Alpine Club Report on Equipment (p. 26).* The Whymper tents were of the ordinary pattern as made by Edgington, but had I to go another journey in the mountains of India I should make the following alterations in the design. The tent, it must be premised, is seven feet square on the base, and the bottom is of one piece with the sides. The transverse section of it, when set up, is an equilateral triangle. It is upheld by four light bamboo poles, which are crossed in pairs at the top of the ends, and a single rope serves for ridge and to support the tent by being carried to pegs or stones before and behind. Both ends should be made to open, and the doors should overlap one another, and be so arranged that either of them can be closed first. The floor should be carried up at least six inches at the door, and should be fastened there to the sides of the tent, so that it cannot lie down. A fairly thick extra fly should be adjusted over the whole tent. This is essential in Kashmir. The sides of the tent soon begin to belly inwards. They can be kept out by thin strings (weak enough to break in a gale) attached to buttons at the seams. For a long journey there ought to be one of these tents for each traveller who has any work to do. The fabric must, of course, be Willesden canvas. Our two Whymper tents, in their cases, with complement of poles

* *Alpine Journal*, vol. xvi. The report is also published separately.

and two extra ones, complete, weighed together 52 lbs. The two Mummery tents weighed together 7 lbs., so that at a pinch one man could carry all four—the accommodation for fourteen men for climbing purposes.

I shall hereafter have a good deal to say, from time to time, about our equipment. A few general remarks may here be in place and will save repetition. We brought a considerable quantity of food with us from England. I should not do so on another occasion, for sheep, flour, milk, and often eggs and chickens can be purchased, even in the remotest villages, and sheep and goats can usually be driven to a height of 16,000 feet. It is well to be provided with a few kiltas full of luxuries. Silver's self-cooking tins should, of course, be taken at the rate of at least one for each European for every day to be spent above coolie-level—that is to say (roughly speaking), above 17,000 feet. We found a quantity of boxes of Peek, Frean & Co.'s Garibaldi biscuits most excellent. Kola biscuits will be mentioned later on. A quantity of chocolate is also valuable. Such things as tea, candles, salt, and the like can be bought in Srinagar, but it is better to bring out tinned meats fresh from home. A few squares of condensed Chelsea jelly will be found most comforting after hot days in the high regions. Our clothes were altogether of wool bought from the Jäger Company, and they answered admirably. Anglo-Indians, however, know that excellent woollen clothes can be bought in Srinagar at a remarkably cheap rate. We had a certain number of gay Kashmiri *namdahs* (a kind of felt rug), with which we carpeted the tents over the mackintosh floors; they also served as covers for bundles of clothes and bedding, and their bright colours were grateful to eyes tired with everlasting snow and rocks. We slept on the ground, in sleeping-bags, some made of Jäger's fleece, others of eider-down quilts. The latter are very light, but costly. It is best for each man to have a quilt bag filled with 1½ lbs. of eider-down and a warm woollen bag; with one or both, according to circum-

stances, he can adapt himself to various temperatures. The native blankets are as good as plaids, and very cheap. Another time I should certainly carry a light wooden *charpoi* (bedstead) of the Elliot pattern, and a low camp-chair of the Blood pattern—that is to say, if I could persuade the superintendent of the Sapper workshops at Rurki (where they have the designs) to kindly cause them to be made for me. I should also carry a double-up table of convenient size and the right height to match the chair.

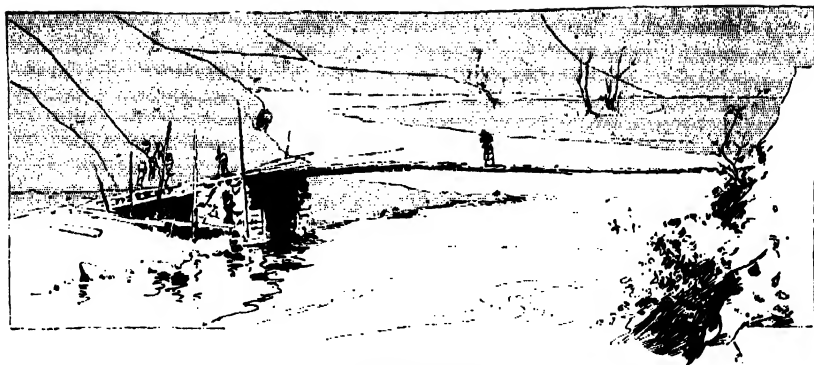


BOATS AT THE CHINAR BAGH.

As it was, I only took a tiny camp-stool (or rather, McCormick brought it, and I stole it from him) and a wooden stool which carried my dispatch-box, and served as table. The two together weighed 5 lbs., and sufficed, but the combination was trying to the small of one's back. An air-cushion is not a bad thing to have for sitting on the snow, but this is a counsel of perfection.

The mountain traveller will have to camp for weeks together on snow, and in bad weather may have to spend a whole day at a time in or about his tent. Under such

circumstances it is above all things important to keep the interior of the tent dry and clean. This is not so easy to accomplish as might appear. It is constantly necessary to leave the tent and tramp about in the snow to see after instruments, baggage, meals, servants, coolies, and what not. Some foot-covering must be put on for the purpose, and left outside afterwards. Moreover, when the day's march is done boots must be changed for something else. The best tent boots seemed to us to be the long felt overalls that are made in Kashmir. If a pair of thin mackintosh stockings, loose enough to be pulled over these, are also carried, the desired result of domestic dryness will be attained. This matter is of the utmost importance in any serious journey. Papers, instruments, pressed-plants, and all manner of things have to lie on the tent floor, and moisture *must* be kept from them.



GURAI'S BRIDGE.

CHAPTER IV.

BANDIPUR TO BURZIL KOTHI.

April 15th.—During the night there was much thunder with heavy rain and wind. In the bangla there were lively times of an even less agreeable sort, so that by 4.30 a.m. we were all awake and impatient to be moving. Nearly two hours were occupied in loading the coolies and breakfasting, for we had not settled down into the habit of doing these things in a routine fashion. A few days later the last man seldom started more than an hour after we were first called.

Our caravan was composed as follows. There were seven Europeans—Bruce, Dickin, McCormick, Roudebush, Eckenstein, Zurbriggen, and myself; three Gurkhas—Parbir, Lila Ram, and Amar Sing; three servants—Rahim Ali (the head-man), Habiba (Roudebush's bearer), and Jumma Khan (Dickin's bearer); two *shikaris*—Salama (Roudebush's) and Shahbana (Bruce's); seven *naukars* (coolies who carried light loads and made themselves generally useful); forty-five expedition coolies; sixteen coolies for Dickin's things; sixteen coolies for Roudebush's; and five coolies carrying Government stores for the Gilgit garrison—total 104

men. To get this miscellaneous assemblage, including as it did representatives of seven nationalities, imperfectly acquainted with each other's languages, to work harmoniously together without loss of time or waste of energy, was not an easy task; but with good will on all hands the result was soon attained.

The morning was fine, and the view back towards the lake admirable, not unlike that of Bellagio promontory from Cadenabbia. We crossed a little bridge and struck to the right up a mountain rib by which the new road ascends in gentle zigzags.

This new Gilgit road was commenced in 1890, but for various reasons the progress was at first slow, only twenty miles being completed in the year. In 1891, Spedding and Co., who had been so successful with the Jhelam Valley road, offered to undertake the work and to complete it within two years, carrying it over both the Tragbal and Burzil passes, and the Hatu Pir. The road is ten feet wide, with a ruling gradient of one in ten. When we travelled along it, the first year of the contract had not expired, but the bulk of the heavy work was already accomplished.

As we ascended the hillside the meadows became richer in flowers and the trees better developed. The view over the lake, the vale, and the Pir Panjal was so increasingly lovely that we were constrained to keep halting to look at it. We could not fail to observe from above how the river steadily encroaches on the lake to its ultimate obliteration. In three hours we climbed four thousand feet and reached a charming gap in the ridge we were ascending. Five minutes further on was the camping-ground of Tragbal, situated in the midst of a wood beside a picturesque but stagnant pool. It might have been in the Black Forest. The ground was covered with strawberry and other plants about to blossom. A month later the place would be a garden. We, however, had no cause to complain of our luck, for at this date in most years the ground is still deep

in snow almost as far down indeed as Bandipur. The only snow to be seen was upon the high mountains. Sacred Haramok, for instance, shone beautifully through the trees, and so did masses of cumulus clouds, which kept forming and changing in all directions during the day, and occasionally dropping a little rain upon us.

An hour or two had to be spent awaiting the arrival of the coolies, but the delay was enlivened by the arrival of Mr. W. Mitchell and Mr. Lennard, the latter from



TRAGBAL CAMP.

Kashgar, the Pamirs, and such-like remote regions. They submitted to a detailed cross-examination from which we profited. We were lunching when they left us, and our camp was being pitched, the most picturesque camp we ever had. When night came on we sat round a huge bonfire, and the coolies sang after their kind.

April 16th.—Bruce and Zurbriggen went off in the dark, intending to push on a day ahead and spend it looking for a bear. The rest of us started before six

o'clock on a fine, cold, Riffel sort of morning. We continued mounting the same spur as before, but cut off the zigzags. The steep slope was covered with trees, blossoming shrubs, and flowers. The flush of dawn lay on the opposing wooded crest. The Gurkhas rushed greedily upon the first Himalayan primroses we saw; they gathered bunches of them and stuck them in their turbans. The flower is a favourite in Nepal, where it is named *toglia*. They talked much about Nepal this morning, emphasising especially the fact that it is a land of good houses. The view back over Kashmir steadily developed. In half an hour we had risen above the trees and reached the snow patches and hard-frozen ground; the path itself remained for some distance further clear of snow. A cold wind blew in our faces. The sky was brilliantly clear, and the view towards Haramok most striking, but westwards there was nothing worth looking at, the snowy range in that direction being poor in form and seen over two dull ridges. A long traverse on hard snow brought us to the Tragbal pass (11,850 ft.), when the view was again fine towards the east, but poor in the other direction. Just before reaching, and again just after quitting the col, there were disappointing glimpses of the peak of Nanga Parbat, or one of its great satellites.

We crossed an exposed upland in the freezing wind, and then descended zigzag down another rib. There was a gully on our right full of snow, down which we might have glissaded for 1,500 feet, but we were advised by the natives not to do so, for the snow was said to be getting thin in places and full of concealed holes, into which, if a man falls, he is killed. The neighbourhood of the track was bordered with skeletons of beasts of burden, and I daresay human remains might easily have been discovered, for more than a hundred men met their death from exposure on the upper level not many months before we passed. The track plunged into a wood, and so reached the spot called Gurai (still under snow), where two streams meet, the

valley commences, and the march ends.* I waited more than an hour there for the others to come up. They were all pitying themselves for the way the sun had burnt them. Roudebush suffered most; he had taken off his *pattis* and walked all day with legs bare below his loose breeches, which did not reach down to the knee. At night his scorched skin hardened upon him, and whenever he moved the sensation was as though a million tweezers were pulling out every hair on his legs. His howls of rage were not musical!

From Gurai we did a second march, following the left bank of the stream down the valley, whose dulness was only relieved by the purple shadows amongst the firs, and occasional pretty reaches of the brook. Keeping along the old track, and, ultimately crossing a bridge and traversing a shady wood, we reached, at 1.30 p.m., the village and camping-ground of Kanzalwan (7,800 feet), close to the left bank of the Kishanganga river, the same that, on March 30th, we saw flowing into the Jhelam, opposite Domel.

April 17th.—At 6 a.m. we crossed the Kishanganga by a rickety bridge, and took the old path, eastwards, up its right bank. The scenery was not remarkable; slopes bare and grassy to the north, wooded to the south, but with trees so tall that, to an eye educated in the Alps, they dwarf the hills on which they grow. After an hour's marching we crossed to the left bank and joined the sketched-in Gilgit road. The valley presently narrowed; the scenery became grander. A rocky peak appeared ahead, and a fine reach of river, brightly reflecting the sunlight, hurried along below steep cliffs. The southern wall is seamed by a series of couloirs, each of which had yielded a monstrous avalanche of snow, over whose icy fans we carefully picked our way. The slopes were often steep and the footing most

* Granite blocks, fallen from above, were lying about, but the limestone was still *in situ* around, either slaty or of a hard blue sort with little bedding or cleavage. The strike is approximately east and west, the dip 70° to the south.

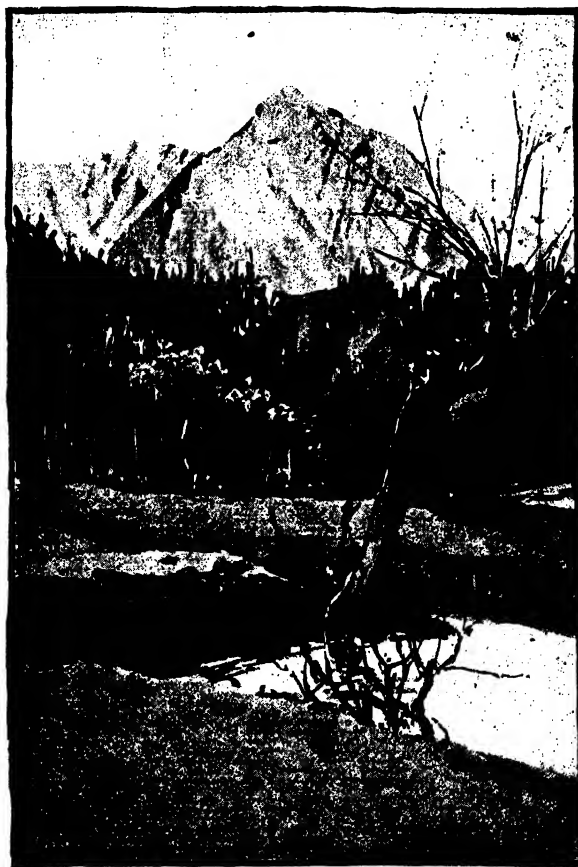
insecure. A Pathan slipped off one of them a few days before, and was not seen again. Beyond the gorge came a flat-bottomed lake bed, wherein was an old conglomerate of water-rolled stuff deposited on the limestone foundation. This lake bed extends as far as Gurais, where the day's walk ended. The road wanders pleasantly along the flat floor through woods and beneath imposing mountains. The coolies straggled about in their leisurely fashion, frequently halting for a moment and resting their packs on the cross-topped stick they carry for that purpose. They were poor uncomplaining creatures, into whose faces one could read a world of imaginary pathos. Once in every march they would take a long rest to eat their frugal meal of *chapattis*, and pass around a pipe. The Gurkhas also halted for their food—merrily enough, they; the others for the most part in silence. When they started again Parbir came along wearing Zurbriggen's tope. He took it off to us in best European fashion, revealing his little wagging pig-tail beneath, with a "How dee do" and a grin that seemed to spread beyond the ample area of his broad face. He has an extraordinary fancy for variety in head-coverings. He had nine different sorts at the start, and during the journey accumulated several more.



PARBIR'S GREETING.

I stopped for a time at Gurais to visit the little mosque, to which the natives ascribe a great antiquity. It clearly occupies the site of some earlier place of worship. A rough wall or pile of rounded stones encloses the square precinct in the midst of which is a raised area similarly banked

around, and on that are two small wooden buildings. Of these the southern is in the nature of a porch, consisting of a passage with a divan down each side. The other is a square chamber with lattice windows, containing the pall-covered tomb of the local Moslem saint. A quantity of



AT GURAI.

the usual flags were leaning up against the wall outside. The arrangement of the two buildings corresponds with that of the old temples of Kashmir rather than with any mosque. There is no structural *mihrab*; the *kibleh* is on one side and not in front of a man entering.

Some quarter of an hour's walk beyond the mosque stands the tumble-down fort of Gurais, consisting of four

angle towers, with flat walls between. It is planted on an apparently artificial mound, and defends the old bridge—a remarkable piece of native engineering, over which goes the road to the north. Here our camp was pitched, when the coolies at last came in. The afternoon was devoted to taking and reducing observations to find local time, compass

deviation, and the like, and to paying off the coolies, who presently set out for their homes. Later on came Bruce and Zurbriggen, having had a blank day.

April 18th.—We crossed the bridge before six o'clock, and started up the right bank to where the Burzil and Kishanganga streams join. Between the valleys rose the fine rock precipices of Habakhotan, crested with snow. We now turned up the right bank of the Burzil stream, and, at



LOOKING DOWN THE VALLEY FROM BANGLA.

seven o'clock, were opposite Chewal, a group of log-huts with a barking dog, which might have deceived a man into thinking for a moment that he was in the Alps, but for the sparseness of the population, and the poverty of the agriculture. A nobly wooded cirque behind the village and rocky Habakhotan above formed a striking view. The camping-ground of Bangla, where we halted, is on a protuberance overhanging the stream, and commands a view up the many-ribbed valley. The lines of the succeeding

slopes seem to be knotted together into the rugged rocks above them. The new lot of coolies, who had started from their homes with the usual delay on such occasions, did not come in till three hours after us, and then only because we went back and hurried them up.

After tiffin, Bruce, Zurbriggen, Amar Sing, and Shahbana, started away with two coolies for Astor. Their plan was to hasten over the Kumri pass, and get some shooting in one of the nalas below Nanga Parbat. They were not, however, destined to have any sport. We ultimately rejoined them at Bunji.

When the bulk of the day's work was done I called the coolies together, and, by help of Dickin and an interpreter, held the following conversation with them.

"Now, coolies, I want to ask you about your temple at Gurais. Of what sort is it? You are Mohammedans, are you not?"

"Yes; but the place is not a *Masjid*; it is a *Ziarat*. It is the Ziarat of Baba Darbesh."

"And who was Baba Darbesh?"

"Baba Darbesh was a Sayd. Baba Darbesh was a fakhir. He came from Yaghistan, one day's journey from Gilgit."

"Was he born in Yaghistan?"

"He came to Gurais from Yaghistan. We don't know where he was born; perhaps at Mecca or Medina. He settled down at Gurais. Before he came the men of Gurais were some Hindus, some bad Mussulmans. He brought *tik Islam* to Gurais. That was a long time ago, perhaps five hundred years ago."

"In your Ziarat there are two buildings, the one you first come to; and another behind it. What is the one you first come to?"

"That is the *Masjid*; the people say their prayers there, and the *mullah* lives there and uses it for a school to teach the boys in."

"Why was it all locked up when I was there?"

"Because the *mullah* was out. He locks it up to keep out the dogs and chickens."

"On the inner door of the outer building there hung a



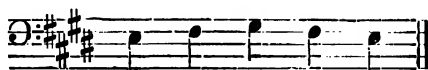
PALAUER AT BANGLA.

piece of wood with writing on it. What does the writing say? Is it Koran?"

"No! It is writing that says, if any *mullah* comes there, will he write down his name, and where he comes from."

"And what is the inner building?"

The chorus sometimes repeated the whole air, and sometimes merely sang—



There was much in the words about Yaghistan and Baba Darbesh. They sang briskly to the accompaniment of vigorous drumming. The chief singer stood or danced in the midst, waving a scarf, fixing his eyes upon the chorus, as they on him, and working his features into exaggerated expressions. Many of the chorus sang in falsetto, which made them look as though they were smiling. The whole affair was, however, earnest, and seemed to produce an exciting effect upon the men. The leader sang as loud as he could, and also directed the drumming and the hand-clapping.

An elderly man was the first to lead. When he retired a bashful youth was forced into his place, amidst much applause, and began a kind of Merlin dance, "of woven paces and of waving hands." He sang at first in a low tone, but gained confidence as he proceeded. Then a third supplanted him, and so excited the original leader that he again jumped forward and danced beside him. As the night came on, and the blazing logs were the only source of light, the strong chiaroscuro ennobled the effect of the whole, saving the onlooker from the trouble of avoiding to notice mean details, and itself accomplishing that process of selection which is the secret of art. The folk sat around in monumental attitudes muffled up in their blankets and eager with excitement. The drum sounded, the logs crackled, the river went booming past, and clouds swept over the sky. It was a picturesque scene, the like of which we were often to behold in the ensuing months.

April 19th.—The method of our march had by now settled down into a matter of daily routine. About 4.30 a.m. the men began to awake, fires were lit, and the coolies

cooked their bread. Presently we, in the tents, packed up our private baggage, and opened the doors. The Gurkhas were always waiting outside to tie up the bundles and give their willing help. The coolies, meanwhile, were loading up the packs and starting off one by one, or in groups, as they were able. My private loads were four in number—a bolster bag containing clothes and the like, my tent tied up with a bundle of bedding rolled round the despatch-box and the stools, and two kiltas in which were the instruments, the photographic apparatus, and the collections. The Gurkhas struck and rolled up the tents. They grew so nimble at this work that it ultimately came to occupy only two minutes. They pitched the tents in less than five minutes. While this was going on, and the camp was all animation, we collected together round the cook's fire, and were served with a well enough prepared breakfast. Between 5.30 and 6 the servants and the mess coolies finally got away, after washing up plates and dishes. It was their duty to forge ahead and arrive in camp before the more heavily laden men who had started in front of them. The morning was always bitterly cold, and we did not linger on the road. No two of us ever walked together for long, but we, as it were, paid visits to one another by the way. I had constantly to stop to write a note, secure a specimen (whether flower, butterfly, insect, or rock), measure strike and dip, or take a photograph. Every specimen or photograph had, of course, to be at once registered in the note-book, which took time. The barometer and boiling-point apparatus had also sometimes to be read, not that the observations were needed in the first part of the journey, but it was well to pretend that they were, so that one might become perfectly familiar with the instruments, and quick in the use of them against the time that the survey should commence.

As soon as the sun reached us he made his power felt, and the labour of the rough marching was increased. The path at this time was everywhere bad, for the new road

was not ready, or was buried under avalanches. We might, indeed, have ridden most of the way, but I would not permit that. It was the business of all to get into condition, and marching was invaluable to that end. The marches, moreover, were short, averaging about twelve miles each, that being considered enough for coolies to cover in a day, when carrying heavy packs. As a rule, therefore, the new camping-ground was reached between nine and ten o'clock, when the worst hours followed, for there was seldom any shade, and we had to sit in the sun till the coolies



THE MESS TENT.

came dribbling in somewhere before noon. All the camping-grounds are near water, well marked, and usually possess a log-hut or two for the coolies to shelter in. The tents were then set up, the baggage distributed, and in twenty minutes everything was in order. The instruments were now read, and presently came the summons to tiffin in the mess tent. We elected Dickin mess-president because he was so good a caterer, and Roudebush's the mess tent because it was the largest and he had nothing particular to do.

After a smoke and half an hour's chat I returned to

my own den for a too short afternoon. The journals had to be written up, flowers pressed and catalogued, other specimens labelled, catalogued, and put away in their places, the list of the day's photographs written up, and the rough notes made on the march drawn out fairly. There were also sometimes observations to be reduced, and at a later stage of the journey there was the engrossing survey, but by then McCormick had relieved me of the work of pressing the flowers, which was a great help. The whole question of provisions had next to be considered with Rahim Ali, and orders given. The lambadhar of the nearest village had probably to be interviewed, and there was always some complaint on the part of one or other of the coolies or servants that must be attended to. The future had to be considered, letters written and sent ahead asking for a new lot of coolies, and for a supply of food to be collected at a certain place by a certain day. Meantime the sick and infirm for miles round came to show their sores and ask relief. They were turned over to Eckenstein, but they pervaded the whole place. Dinner was served with the approach of evening, and after it, as soon as darkness came on, I had the photographic stuff * to attend to—new films to be put into the cameras, exposed ones to be properly packed, and everything made ready for the next day so that the minimum of packing should remain to be done before the early start. By nine o'clock every one was asleep.

On this particular morning (April 19th) the views were charming, the air cool, the march short, and the coolies lazy, so we were able to take our ease and enjoy it. After an hour's going we reached the point where the valley makes a considerable bend, and displays the contortions of the quartz-seamed rock. It is bent in all directions and reduced to a finely laminated mass. Half-way between Bangla and Mapnun we passed the bridge where the Kumri route turns

* Almost all the photographs I took between Srinagar and Hunza were lost or destroyed.

off. The left side of the valley is diversified by graceful ridges crested with fine trees, by notable avalanche gullies, and by considerable cliffs. An eagle floating round and round caught my eye by the brilliancy of the light flashed back from the upper sides of its wings. We rested awhile at the opening of the Jeshat nala, where a noisy stream for once rivalled the waters of the Alps. Parbir pointed out veins of quartz, calling them "money istone." Fire and water he said gets money out of such rock. We passed a number of Spedding's Pathans at work on the road. "Stir a mush up,"* I said, and they answered me with a grin. "Bah!" said Salama, "they are all thieves," drawing his hand across his throat. We walked on opposite to a great mountain knee clothed in forest, and with deep avalanche gullies on both sides, and so came to a point whence we looked down upon our camping-ground, close beside the hamlet of Mapnun. The tents were pitched a few yards from the rushing stream, and over against a craggy wooded slope, that it would have been pleasant to lie and watch all the afternoon; but leisure is a charm that a studious traveller can seldom enjoy. The river banks were littered with fragments of a beautiful and very hard conglomerate, a fragment of which we ultimately secured with the greatest difficulty.

April 20th.—Roudebush went off early hoping to shoot. The rest of us started at 5.30. The interesting feature of the valley during the march was the number of *débris* fans, which then seemed to us great, abutting one against another, and each at the foot of an avalanche gully. The fans jut out to the river and make it wind round them in graceful curves. This phenomenon was observed on a much vaster scale near Gilgit and in Ladak. The scenery was in other respects dull till we approached the opening of the Nagai valley, the true continuation to that of Mapnun. Here, turning our backs on a fine mountain mass, the finest yet seen, we went northwards up a side valley, which, however, retains

* A Pashtu salutation sounds something like this.

the name of Burzil and gives it to the pass at its head (also, though less generally, called the Dorikun pass), by which we were to cross the Himalayas to Astor and the Indus valley. Soon after leaving behind the Minimarg village, which is at the junction of the valleys, we quitted the limestone, and entered the granite region. But the views were not yet in any sense Alpine; rather Scotch on a big scale. The lower slopes were plentifully dotted with birch trees, which yield to the avalanches and are bent about by them but not destroyed. Their white leafless branches gave a weird character to the scene, well in harmony with the nature of the ground, covered as it was by a withered mass of last year's plants from which the snow had but recently melted away. A noble mountain stood up behind us, and was still a conspicuous object from our Burzil camp. Deep valleys isolated it from its neighbours. We always talked of it as the Arrow Peak, from its resemblance in form to a Neolithic arrow-head.

As we plodded along, the only flowers enterprising enough to salute us with a promise of summer were a few yellow crocuses and clustered primroses. We should nevertheless have advanced happily enough but for ominous gatherings of storm in the south. We kept the tent coolie with us, and were able to pitch a tent the moment we reached the sloping and uncomfortable camping-ground beside the wretched hut called Burzil Kothi, after three hours and a half of leisurely marching. It was none too soon. Clouds enveloped all the hills, snow had begun to fall, and the wind whistled amongst the birches, almost drowning the noise of the brook. It was a wild scene.

We gave the coolie some strong shag tobacco, for which he promptly made a pipe by rolling up a bit of birch-bark. He took a deep inhalation of the smoke, which set him coughing and spouting like a volcano. The weather kept getting worse as the coolies came in, and it was no easy matter to pitch the tents and stow the baggage. Small electrical discharges were heard in the upper rocks, and

masses of snow came rolling down the slopes. The dāk hut was not empty on our arrival, for there were coolies in it awaiting the Gilgit mail, and a lot of ragged Pathans on their way to work at Spedding's road. When the hut was as full as it could hold there were half the coolies without shelter, and the night was going to be bad. We made tents for some of them out of blankets, for others out of mackintosh sheets, stretched on the birches. Others again were stowed under the flies of Rondebush's tent, but there were still twenty over, so he decided that, as his tent was the only one without a floor in it, they should have that, and in they all gratefully crowded. We packed ourselves into the Willesden tents. As darkness closed in, the snow settled down into a steady fall, and we felt certain that the pass would be closed for a few days at least.



COOLIE SMOKING AN EXCAVATED PIPE.



LOOKING NORTHWARDS FROM BURZIL CAMP.

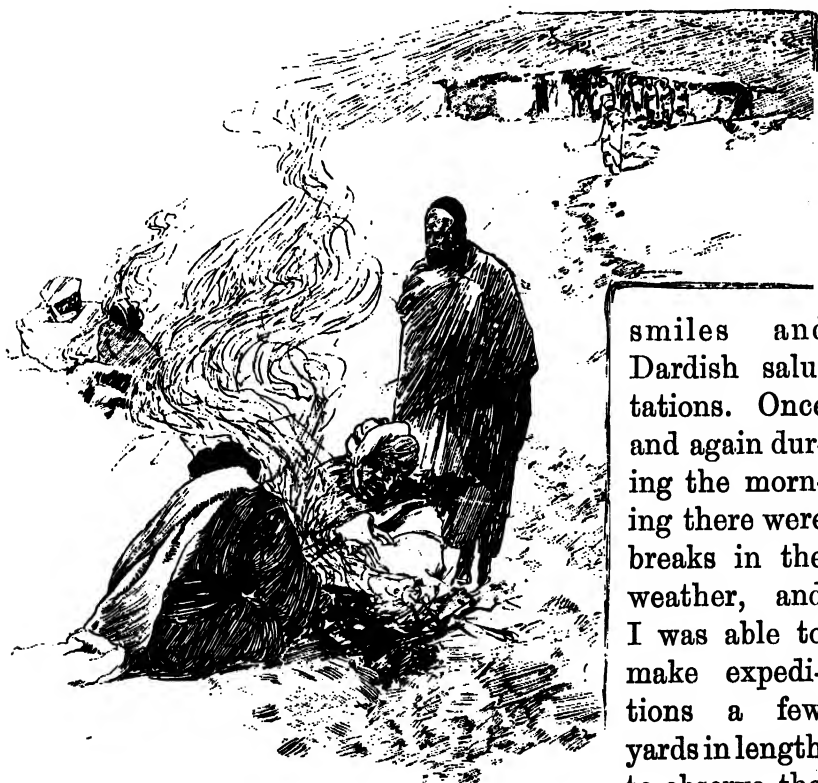
CHAPTER V.

THE CROSSING OF THE BURZIL PASS TO ASTOR.

April 21st.—Morning broke, sombre and cold, with five inches of fresh snow on the ground, and every birch twig edged with a snowy blade. At breakfast-time the sun shone feebly, and all went forth to see the parting of the mists. Glimpses of bright snow-slopes and silvery fields appeared in various directions, and jagged rocks jutted out here and there. The scene was as wonderful as it was unpromising. Rain, sleet, snow, and hail soon resumed their falling. The temperature, however, rose; indeed, a steady thaw prevailed during most of the day; but we were miserable enough.

The lambadhar of Minimarg, who considers himself a kind of captain of the pass, came to say that we could not cross for some time, and urged us to go down to his village. We declined to do this, but ordered the bulk of the coolies to descend to pleasanter levels. The inde-

fatigable Thekedar of Gurais, who had watched carefully over our welfare since the time we entered his country, came up to see us and do what he could for us. Picturesque it was to watch the poor coolies grouped about their little shelters, and making shift to get their food before starting down. I visited them all, and was greeted with pleasant



COOLIES AT BURZIL.

smiles and Dardish salutations. Once and again during the morning there were breaks in the weather, and I was able to make expeditions a few yards in length to observe the fine effects of cloud, snow,

and rock, with our frail tents and picturesque camp-followers for foreground.

Our meals were taken at the dāk hut, where the cooking was done. There were plenty of holes between the stones of its walls and the birch thatching of its roof. In this and other respects its interior, with a wood fire burning and the smoke following the draughts about, so resembled that

of many a cheese-maker's hut on the upper alps that it was hard to believe ourselves far from Switzerland. We sat on lumps of wood and other protuberances, and Roudesh considered himself the luckiest, because he appropriated a bundle of some size, combining softness with solidity, and covered up in a new blanket. Not till he had finished his meal did the bundle wake up. It was a sleeping coolie.

April 22nd.—A grand sunrise, in a clear sky and over the



BURZIL CAMP.

white landscape, raised our hopes and made us regret our kindness to the coolies. Possibly, as things turned out, we might have forced the pass this day, but it would have been desperate work for laden men. We spent the hours cleaning up ourselves, our things, and the tents, which were invaded by slush. I worked for some time at the instruments, and in so doing unconsciously served as model for McCormick. Clouds came up again in the afternoon,

and snow began to fall as thickly as ever, but I felt the need of exercise, and so wandered forth and ascended a neighbouring knoll about 500 feet in height. I slept in Roudebush's tent, and gave up mine to the Gurkhas, but they found it cold, and preferred to retire to the dāk hut.

April 23rd.—

Another wretched morning dawned, and was followed by a wretched day. Clouds enveloped us almost all the time, and snow fell savagely. Our fingers were so cold that it was difficult to hold a pen. Roudebush and McCormick had accumulated so painful a stock of energy that they were obliged to work it off. They faced the storm and modelled a bust of me in snow, planting it upon a well-proportioned snow pedestal



MAKING A SNOW BUST.

with cherubs climbing up the angles! They played various pranks with it, crowned it with a Pathan cap or turned it into a Roman Emperor with a pipe in his mouth. A thaw then took it in hand, and treated it in an impressionist manner. The head bent slowly over back-

wards, and the last remaining eye gazed stupidly at the zenith.

Two of us went out for a ramble before dusk, and found the snow deep on the way to the pass. The evening closed in miserably, but, hoping against hope, I sent down a message for the coolies to come up at break of day. They could go down again if it was still impossible to cross the pass.

April 24th.—Snow fell heavily all night, but the cold was not intense (min. 29° Fahr.). The morning was altogether unpromising, and I did not expect that the coolies would



MESS IN THE BURZIL HUT.

arrive. At seven o'clock, however, in they came, and, as the sky lightened just then, I resisted the advice of the local wiseacres, and gave orders for camp to be struck and a start made. We breakfasted hastily—far too hastily as it turned out—and the last man was off by 8.30 a.m. Mirza Khan offered to come and guide us, but I sent him back, as he clearly had no heart for the work. Snow was falling gently; there was some wind and the threat of a bitter day. We packed ourselves up in warm clothing and prepared for the worst. It was, however, from heat that trouble was to come, and we soon began to shed our wraps.



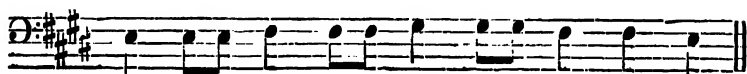
CROSSING THE BURZIL PASS.

We followed the tracks of the coolies, and presently caught them up. They clustered around us and desired to turn back. When they found that was not to be, they began malingering. One youth was clearly ill, so I dispatched him home. The remainder were sent forward in a long line. Roudebush, McCormick, Eckenstein, and the Gurkhas were arranged along it to keep the men going, whilst I went ahead with two lightly-laden coolies to select and tread down the way. The depth of the soft snow was my only difficulty, but the others had a severe task. The coolies were an unwilling lot, always throwing down their loads and attempting to bolt. When brought back to their work, they would advance fifty yards and then sit down; or they would say, "No! we will die here; it is as easy as on the top." They had to be carefully watched and kept from straggling about. If they had been permitted to wander and loiter about, some would have bolted, and others would have so delayed that they would have been benighted and probably frozen on the upper levels.

Our way was up a sinuous white valley, which gradually narrowed and steepened. There was a definite point where it became clear that the climb and struggle of the pass commenced. From end to end of the long line of coolies arose the cry, "Allah! Allah!" We toiled steadily up the twisting trough. There was always a bend ahead which we hoped might be the last, but another awaited us round the corner. Sometimes the sun came out for a moment and shone with scorching heat, but clouds and mist soon enveloped us once more. We could seldom see further than a quarter of a mile in any direction; this was of the less consequence, as the form of the pass excludes distant views. The nearer views at this time of year are of dull snow-slopes and an occasional craggy skyline.

In the midst of this dreary solitude, after three hours' toil, a long halt was called, and the men sat in a group on

- o the snow. They began to sing, in verse and respond, to this refrain :—



Their droning song sounded weird in the cold thin air and the mist.

As we rose the weather grew thicker and the landmarks were all blotted out. I kept my eye on the compass, and concluded that the leader had lost his way. We were in the neighbourhood of the final slope, but if we attacked it at the wrong point we should be carried 1,000 feet or more too high, and the coolies could not accomplish any such superfluities. I called a halt, and was informed that there was a *dāk wala* (or post-runner) amongst the extra coolies taken on for the day. I caused him to be relieved of his load, and he bounded forward with alacrity. He turned off at right angles to the left for some distance, then, resuming our previous direction, brought us to the top of the pass, which is 13,500 feet high. The ascent had taken us five hours. The *dāk wala* sat down, and I thought he was laughing, but he was sobbing aloud, "I'm not a coolie; I'm a *dāk wala*; boo, hoo." He recovered his former good spirits in a few minutes, and was the merriest of the crowd for the rest of the day. All the coolies arrived in about half an hour, and we rested a while on the snow.

The fog presently lifted and disclosed around us a poor set of granite peaks,* neither imposing in size nor dignified in form. They and the valley below were buried in a white mantle, and it seemed impossible to believe that the crevassed and cracking snowfield over which we had been marching was not true *nevé*, but mere winter snow which would be entirely melted away by the end of July. In an ordinary year the pass is clear of snow for six weeks at least. It is always liable to storms, and people have

* From Minimarg to Chilang the rock varies between fairly coarse hornblende granite and diorite.

perished on it in most months of the year, and in most years.

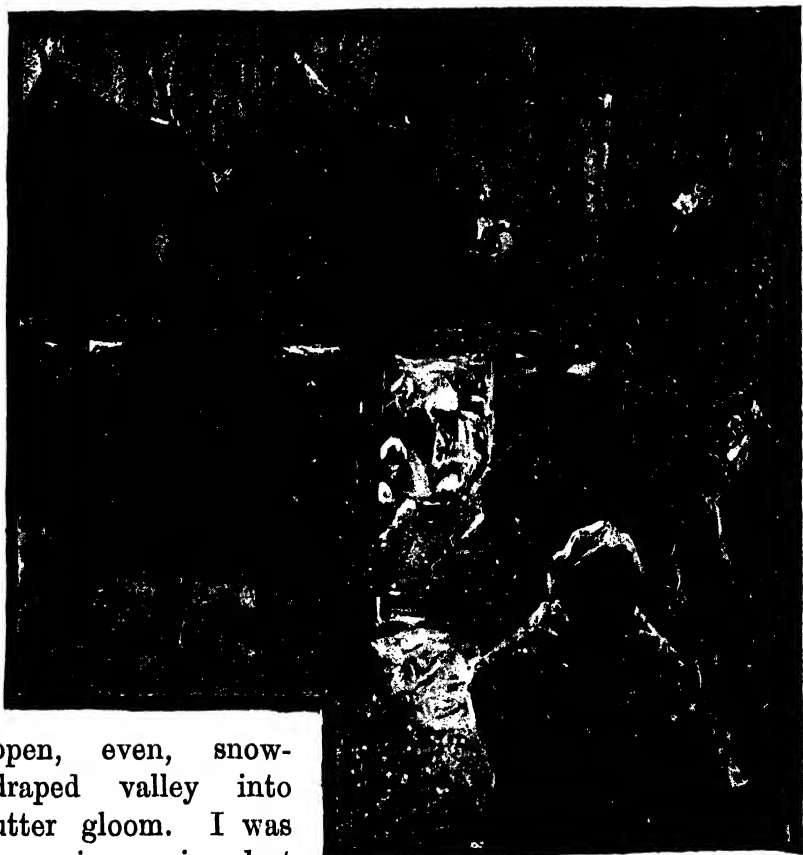
We halted for an hour, took sphygmograph tracings of our pulses and boiling-point observations for altitude. Several of the men were in rather a bad way. Some had sore eyes, and were destined to suffer for a few days in consequence. Rahim Ali was mountain-sick, and had to be supported by two men during the last hour of the ascent.

We began the descent at a quarter-past two o'clock, with only about three hours of daylight before us. The valley was wider than the one we came up, and a few little avalanches fell down the slopes. We gradually left the deep and relatively firm snowfields behind, and came to a more troublesome and fatiguing area. The surface was of varying strength. Three or four paces might be taken on it, but at the fifth it would give way and let us in up to the thigh. With much labour we would struggle out, only to be similarly dropped a yard further on. No more tedious method of progression can be imagined. In two hours from the pass we reached the ruins of the Sirdar ka Kothi, or old dāk hut,* which used to be the end of the march. It was buried in deep snow, and we had to turn our backs to it and hasten on.

A few minutes later we beheld the sickly sun balanced on the crest of the western hills. An hour below the hut a patch of the new road clear of snow was reached, but it was so slushy and slippery that the change was no improvement. The snow soon resumed its supremacy, and we went floundering through it, or treading daintily upon its brittle crust as before. The scenery was dull, but I saw one fine effect, and rested to look at it. A rocky peak (U 1), with a delicate snow-saddle beside it and a skirt of snow beneath, waved a cloud streamer from its crest. The valley below

* Later in the year new and strong stone huts were, I understand, built here, on the top of the pass, and at Burzil. These huts, if kept in order, should greatly facilitate the crossing of the pass in winter or bad weather.

was wrapped in shadow, but peak and cloud reflected the brilliant light. Another bright peak appeared behind a transparent veil of mist. One could but look a moment and hasten on; there was no time for contemplation. Before us, as we went, the scene was the bleakest possible. A dark roof of cloud covered everything, and plunged the



CAMP ON THE ROOF OF CHILANG HUT.

open, even, snow-draped valley into utter gloom. I was becoming anxious lest night and possibly storm should overtake us in these inhospitable regions, but anxiety did not help matters, so I amused myself by watching Jumma Khan, with his round turbaned head, his long coat unbuttoned down the front, his hands deep in the pockets, and his twinkling little legs wrapped in green pattis—always an amusing figure. It was apparently a matter

of principle with him not to take his hands out of his pockets. He might fall deep into the snow; it was of no consequence; he would plunge and roll around with a laughably distorted countenance and the funniest antics till he was on his feet again.

The darkness was growing upon us, and there were no signs of a margin to the soft snow or of any habitation. I hurried ahead of the men to make a track that they might at least feel their way along, and thus about seven o'clock reached the miserable hut called Chilang. It was as wretched a goal as hope ever led to. Its flat mud roof, measuring about five yards by seven, was the only spot anywhere about that was clear of snow. Upon it in due season the two Whymper tents were pitched. Dickin chose for his what, when the snow was swept away, proved to be a mud swamp. The hut itself was low, smoky, and black; the servants and some of the coolies crowded into it; the remainder were offered tents, but did not care to put them up. We were all tired and miserably cold. The struggles of pitching camp and arranging for the night, with every rug and sleeping-bag more or less damp, and only the confined roof-area for our evolutions, were almost too much for our tried tempers. Breakfast before starting had been our last meal. Most of us were too hungry to eat, and too uncomfortable to sleep. We rested, however, and were thankful that the chief difficulty of the Gilgit road was now overcome.

The pass in the condition in which we found it was not like an Alpine pass. It presented no mountaineering difficulties and no dangers except from storm or loss of way in fog. But it was most fatiguing. Almost every step was upon soft snow, and this grew from bad at the start to worse in the middle and worst at the end. For the few moments when the sun shone upon us through a clear sky the heat was intolerable. It was not like ordinary severe heat. It was scorching and furious. We were all badly sunburnt. Observers have often noticed that the worst cases of sun-

burn occur on cloudy days when there is fresh fallen snow on the ground. This was such an occasion. Rahim Ali and Lila Ram suffered from mountain sickness. As there were not enough dark glasses to go round, many were more or less snow-blinded. Bad headaches and tempers were likewise not uncommon, but a good night's rest removed them.

April 25th.—The watershed of the Himalayas was now passed, and we had entered the basin of the Upper Indus. Its further side is embanked by the Karakoram Himalayas which we were journeying to see. No physical difficulty of importance any longer intervened between us and our goal.

There was no mention of an early start this morning. Nine o'clock was the hour fixed for breakfast, and some were even late for that. What miserable wrecks we all looked, with burnt and swollen faces, bloodshot eyes, and clothes draggled, dirty, and damp! On the other hand, we were in high spirits, and so were the coolies after their hard work. By half-past nine the last man had started, over snow again, and that soft, but it presently broke up into patches which tended to decrease in number and size as we advanced. For some time the valley remained as dull as ever. We crossed the mouth of a gorge leading to the Chuchor La and the Deosai plateau. As we approached Das, the mountains ahead (U 4 and U 5) mimicked the Mischabelhörner in outline. There came also a cessation of the continuous granite or diorite, through which we had been passing, and with this the lumpy forms of the mountains gave place to splintered and fantastic rocks, planted high aloft, and whose *débris** mingled with diorite fragments in the fans and at our feet.

When the last snow was left behind we sat down in the shadow of some big boulders and were thankful, for the sun was hot, and the previous day had fatigued us all. A little further on we came to the Das hamlet in two hours' walking

* Rather compact greenstone.

from Chilang. We expected to change coolies at this place, but none had come up to meet us. The obvious conclusion was that we had to go on as before. Jumma Khan, planted on widespread legs in the midst of a ring of servants, arrived at this result, apparently by a series of syllogisms. He checked each in turn upon a finger, and threw out all ten to emphasise the final conclusion. The villagers brought bowls of fresh milk, which we drank before proceeding on our way. The mouths of the side valleys below Das were for the most part flanked by ancient moraines, at first small, afterwards very large. The valley below Khakan turns towards the west, and discloses one of the true Himalayan giants, apparently the peak 22,368 feet, an easterly outlier of Nanga Parbat. Its chisel-shaped snow-crest shot above the clouds and dwarfed into insignificance the hills around us, masquerading as giants in their cheap winter snows. The valley increased in beauty, and groups of firs invited us to rest in their shadow beside the clear and babbling stream. There were plenty of junipers on the hills, but patched about in an ugly fashion. Only the birches held together, keeping themselves in the avalanche gullies, where their suppleness enables them to flourish.

The miserable huts of Karrim (10,500 feet) were the end of the march. Camp was pitched on terraced fields in a shadeless spot. When Parbir had leisure he surveyed the resources of the hamlet. Returning to us, and plunging his hands deep into his pockets, he thus soliloquised: "Astor woman good; Hunza woman good; Skardo woman good; here woman no good. Me go cooking."

Meanwhile Zurbriggen, at the other end of camp, was raising the echoes with a fragment of song, the rest of which we never heard:—

"Ach! meine Mutter ist ein altes Weib
 Sie sagt zu mir
 Ein Weibsbild sei
 Ein wildes Thier."

April 26th.—The youngest member of our party took this opportunity of coming of age, and all day long imposed an atmosphere of festivity upon us in celebration of the event. The weather would not enter into the spirit of the occasion. It was already raining when we started at six o'clock, and so it continued at intervals throughout the day; but for this we were thankful, preferring wet to scorching. The clouds, moreover, improved the look of the mountains.

We soon came to where a fan of granite *débris*, at the foot of an avalanche gully, stretches across the valley and blocks it up. The river is cutting a little gorge through it, and silting up the lake-bed behind, an operation which, repeated on a larger scale all over the mountain region, has determined many of the minor valley-forms.

The season was less advanced than in the fertile Gurais valley. The rose-bushes were not in blossom, and there were few flowers discoverable. Wormwood began to be the commonest plant. Lower down the valley there were a few flowering shrubs. The scenery was finer than anywhere before, the mountain-forms nobler, the ribs bent into nodding brows that overhung the valley. Fallen blocks beside the path assumed large dimensions, and grouped well with the increasing variety and number of trees. The islands in the clear river were covered with willows, and thus provided diversified foregrounds, such as were not to be found in valleys south of the Burzil pass. Signs of human industry were more numerous, and made the landscape less dreary and deserted.

Two hours' walking brought us to the prettily-situated Godhai hut (9,100 ft.). The men there were on the look-out for us, and greeted us as a fawn might greet a tiger. They stood with hands joined, like a priest going to the altar, and answered our questions, unhampered by prejudice in favour of veracity. Had coolies been sent to meet us? No, none had come. Provisions, then—had they been sent? Oh, yes! plenty of provisions. How many sheep? As many as the

sahib pleases. Eggs and chickens? Yes! as many as the sahib pleases.

"Well, show us the sheep."

"There are no sheep."

"Why did you say there were? Bring the chickens, then."

"May the sahib be merciful! There are no chickens."

"Nor eggs either?"

"No! no eggs. Nothing has come."

"Then why the deuce did you say it had? Have you got nothing to sell? Some milk, perhaps?"

Milk was ultimately produced, and they were paid double the proper price for it, whereupon they loudly clamoured to be paid fourfold. After lunch we crossed the stream from the Dichell nala, a valley leading in six marches to Astor over the Alumpi La. Old moraines at the mouth of this and other valleys from the east assumed large proportions, yet there were no visible signs of glaciation on naked surfaces of rock. We walked briskly along the road, delighting in the novel softness and fragrance of the air and the growing grandeur of the views. A man met us with a pony that had been sent for me, but I preferred to go on my own feet. The others tried him, but found his saddle an exquisite instrument of torture. A charming flat meadow and polo-ground at Bilame was suggested to us as a good camping-ground, and an exhibition game of polo was offered as an inducement to make us stop. But Rahim Ali had heard that Mikiel, a little further on, was a land of flowers, chickens, and sheep, so we only halted a brief space for a "putting the weight" competition (Parbir 1, Roudesh 2, the rest nowhere), and to pour stuff into the eyes of those who were still suffering from partial snow-blindness. "Both my eyes are melted," one coolie said, "and when I open them they pour out."

We pitched camp at Mikiel about 2.30 p.m., and settled down for a pleasant afternoon between the showers. Stony places surrounded the grassy patch, and willows and blossom-

ing shrubs shaded the tents, which Parbir adorned with flowers, to his own huge amusement. Then, as night came on, he was for starting a bonfire; but rain began to fall. He looked around and took in the situation. "All right; rain come; fire no good; me go sleep." Therewith we all followed his example.

April 27th.—Rain fell heavily all night, and clouds were low upon the peaks when we looked out in the early morning. Clearly moisture was being precipitated above; but, as the day warmed the valley, rain ceased to fall into it. We started at eight o'clock, the temperature being pleasant for a march. McCormick and I walked away together, the others loitering behind to shoot birds, a great variety of which relieved the loneliness of the road. On rounding the high old moraine, that blocked the view down the valley from Mikiel, we entered splendid scenery. The grand lines of a *débris* fan, whose magnitude was felt by the eye, led up over against us for some 2,000 feet to the mouth of the gully through which all its parts had fallen. We could track the winding couloir high above into the riven complexity of what, even then, was only the outer buttressing of a minor mountain mass. It was here, for the first time, that the scales of the Alps fell from my eyes; the mightier magnitude of these regions was revealed to me, and Nature took on a vaster if not a nobler magnificence.

We were approaching the mouth of the gorge through which our river enters the Astor valley. Gate-posts of granite stand on either side of the stream, and every available level is occupied by *débris* fallen from above, left behind by old glaciers, or deposited by running water. Each fragment plainly tells its own history, and so the traveller as he goes perceives the succession of processes and agents whereby the valley has been sculptured into its impressive form. Rent granite masses, scarred precipices, scattered *débris* combine to produce a scene of grandeur, which is redeemed from savagery by not infrequent trees and even

flowering shrubs and plants growing in crevices of the rock or on little shelves and plateaus.

The new road was laid out towards a bridge not then built, so we had to follow the old path, and not unwillingly, for it passes through the depth of the gorge and makes intimate fellowship with the roaring torrent. Elsewhere it mounts aloft and circles round a jutting angle, so obviously intended by Nature for a point of view that Parbir halted there as instinctively as ourselves, and we found his merry person adapted to a rock, and the ice-axes he was carrying planted in the ground like flag-staves beside him.

We paused for a last look back at the valley which a few steps would close against us. High aloft were the finest peaks we had yet seen, but-tressed by a shaggy rock-arête of forbidding length, and



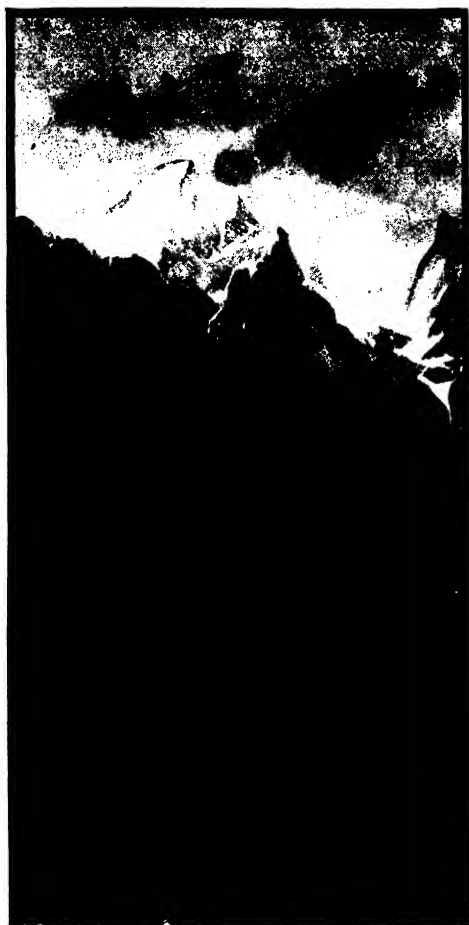
PITCHING CAMP AT MIKIEL.

sending down from their ample lap the broken ice-stream of the Mikiel glacier.

The spirit of a climber awoke in me, and I longed to be aloft, wrestling with ice and rock, and triumphing in the wide vistas which the blind crags have commanded through uncounted ages. But not to-day when every peak was roofed with cloud, and some were veiled in mist, and some utterly blotted out: to-day the valley was best—the valley full of transparent vapour that softened every outline, and through whose gossamer lightness the solid hills were transfigured into celestial apparitions. As we stood, entranced, a silent lammergeier floated past us, so near that the wide span of his wings seemed to be an appre-

ciable fraction of the breadth of the gorge. Stray rays of sunlight down below dappled the old moraines and made of terraced fields, new sown, a magic patchwork counterpane for the *débris* fan below the glacier's foot.

Another half-hour's loitering walk brought us to the outer



MOUNTAINS BEHIND MIKIEL.

gates of the gorge. They are narrower than those within, and a rude stone hut, built at the foot of the eastern rocks, adds not a little to their apparent scale by its dwarf proportions. A few steps took us beyond the narrows and into a new world. The river flowed no longer between rocks, but between steep banks of delicately bedded sand, divided at intervals of about 40 feet by seams of water-rolled stones. The sand must have been deposited by still waters, and the stones washed over them by floods.

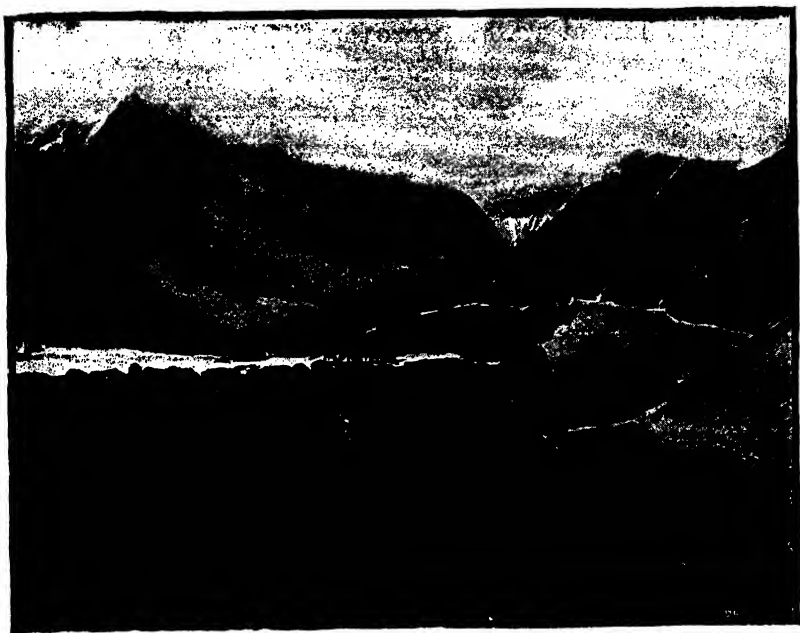
A little before ten o'clock we crossed a rough bridge (9,183 ft.) to the left bank, and the Astor valley began to be

visible. We noticed large moraines and fans protruding into it from side valleys. Such were the obstacles by which it has been more than once dammed across and turned into lake-basins at different levels, as the terraced formation of the deep alluvial filling also seemed to imply. We turned our backs on the Burzil stream and Astor, and proceeded

to mount the right bank of the Astor river towards the bridge. We were strolling along casually enough, thinking of I know not what low-lying trifles, when, on a sudden, high aloft, a great white throne was set in heaven before our bewildered eyes. Nothing was ever more astounding; nothing more sublime. It was a group of the snowy buttresses of Nanga Parbat filling the end of the valley and shining in the sunlight through a misty veil. We advanced towards it. Our long line of coolies was level with us on the other side of the river, with Dickin at their head waving his hat at us. Once over the bridge and on the left bank a good path led towards Astor, but steadily ascending away from the stream. The wide valley, the great slopes of its sides, the walnut trees and what-not reminded me of the Val d'Aosta, and the mountain mass over against Astor of Mont Emilius. I meant to ascend it and behold all the glory of Nanga Parbat from its top, but weather forbad.

An hour's walk brought us back opposite to the mouth of the Mikiel valley, just when Roudebush was emerging from it. We were now separated from Astor by huge moraines deposited by some ancient glacier that descended from the west. Their crests are as much as 2,000 feet above the bed of the Astor river. They have been cut through by the torrent, and the face so displayed is broken up into earth-pyramids and blades of astonishing thinness. To pass this obstacle we had to mount some 600 feet. Its wilderness of dry mounds overgrown with wormwood was like a tiny Brianza with all the lakelets dried up. The slope on the opposite side of the valley was cut across by a large irrigation canal, bordered by vegetation, like some *wasserleitung* of the Alps, and it was with a pleasant feeling of familiarity that we found our path adjusting itself to, and for some time following, a similar artificial brook. In former days artificial irrigation was much more developed in this region, but Chilasi raids rendered life and property insecure, and agriculture is only now beginning to recover under the *Pax Britannica*.

A long traverse over barren slopes brought us, about two o'clock, to a terraced series of fair level swards, shaded by walnut trees. Here is the European camping-ground, and above it the palace of the petty Raja of Astor. The lowest and largest of the terraces is the polo-ground. Whilst we were awaiting the belated coolies, the Raja and his son visited us, with gifts of dried apricots, walnuts, and eggs. The native commanding officer of the garrison, the tehsildar, and a number of their hangers-on also came and paid their



LOOKING UP THE VALLEY FROM ASTOR POLO-GROUND.

respects. The coolies were paid on their arrival and started off homewards almost at once. They were an indifferent lot, considered as coolies, but they were decent fellows, and I was sorry to part with them. They took life with alternate gaiety and seriousness, and in their sad moods they looked like so many lamenting Jeremiahs. Plentifully bakshished, they went away happy enough. The servants begged for two days' rest. The first was necessary; the second could not well be avoided, for it marked the close of

Ramadan, and though nobody had observed the month of fasting, all desired to celebrate its ending with the customary feast and *tamasha*. We had a *tamasha* of our own that evening, with the help of our only bottle of whiskey. The valley resounded with all the songs we knew, and it was late before the echoes were allowed to rest.

April 28th.—Roudebush was to start early and go forward by forced marches to get some shooting before rejoining us at Gilgit, but, when he was called at four o'clock and informed that his coolies had not put in an appearance, he appeared to receive his respite with joy. He was off before six, and no sooner was he gone than heavy rain began to fall. The rest of us were not moving much before nine, and very dissipated we felt. After lunch the sun came out, and the clouds began to part upon the lower hills; there was no real clearance, however, and the remainder of the day was dull, chilly, and gusty. I went out in a fine interval to visit the town. The well-made path led for about a mile up a gentle slope and brought us unexpectedly to the edge of a deep, steep-sided ravine, cut down by a glacier torrent into the alluvium. The town (7,838 ft.) stands on the brink of the opposite cliff, a picturesque group of houses in a picturesque position. The mud-brick hovels are fitted in amongst big boulders and the like unevennesses, and a crazy old fort stands beside them on an admirable site. There are many poplar trees planted about. We descended into and crossed the nala, passing close to an immense boulder in the bed of the stream. The ascent on the far side goes along the foot of some large earth-pyramids surmounted by nodding rocks. The postmaster met us, eager to show off his Babu-English. He said the post-office was the chief sight of Astor. It was a jumble of small mud chambers and verandas, with prints from English illustrated journals stuck over all the walls. The bazaar was close by—a collection of half a dozen tiny shops. The whole contents of the richest of them would not have filled three kiltas. The goods on sale consisted chiefly of salt, spices, cotton

stuffs, slippers, pots, and blankets. We bought two blankets, and of course were swindled over them. All the bazaar houses are the same in plan. The outer door opens into the square shop, the rear half of which consists of a raised divan with a cupboard behind it. Under the divan is the residence of the chickens. On the right hand of one entering are niches in the mud wall and a place for an oil lamp. A door on the left opens into an oblong inner chamber containing beds, a hearth, and in the wall more niches. A finer hovel has also a door on the right leading to another chamber. The ceilings are low and formed of logs blackened by wood-smoke. The roof of beaten earth lies directly on the logs.

The fort was the only other thing there was to see. Its walls are of wood and stones plastered with mud. The place was foully dirty, but the men's rifles were well kept. The heavy armament of the place consisted of three brass guns which the soubardar explained were only used for salaaming. The bunks and holes in which the men slept were incredibly filthy. We climbed to the roof to survey the splendid view, and then, casting a glance at the mean wooden box which serves for mosque, and the mud chamber with wooden veranda beside a tank, which is the Hindu temple, we left the place amidst the salaams of our attendant crowd of postmaster, munshi, soubardar, havildar, sepoys, and tradesmen, and started for the walk of a mile and a half back to camp. When the chilly night came on we turned in and went to sleep, to the tunefullest tremolo frog-croaking that I ever heard.

April 29th.—During the course of a busy morning the Raja interrupted us with a visit. He was accompanied by his two sons all dressed in their freshest linen with bright green and red garments over it, and brilliant turbans—the best dressed Raja-folk we met in Kashmir, and apparently the most intelligent. The last hour of the morning was enlivened by the sound of guns, drums, and pipes, and the various noises that denoted the coming together of people, either to the

Raja's house above, or to the polo-ground below. When all was ready for the game an assemblage of such notables as the place produced came to fetch us to the ground. The Raja-folk seated us in their state-box, that is to say on a carpeted piece of stone wall opposite the midst of the long, narrow strip of field. The populace seated themselves along the two walls, and at a signal the game began.

The technicalities of the Kashmir form of polo have often been described, and need not be repeated. The opening had all the appearance of a race, the players of both sides riding together full gallop from the same end of the ground, and the leader holding the ball in his hand and striking it in the air with his stick just when he passed the Raja's seat. Then commenced the normal struggle to urge the ball through the opponents' goal, and the progress of the game could be readily followed. The dozen horsemen engaged played with much spirit. Their ponies were none of the best, their saddles and harness were as ramshackle as you please, their clothes were of all sorts and colours, but together, in their swift movements and eager attitudes, they formed themselves into admirable pictures, and assuredly few polo-grounds in the world could afford a more splendid setting for horses and men.

Amir Khan, the Macadam of Astor, was the boldest player; the Raja's son was the handsomest and best dressed, but he was a beginner at the game. The people took the keenest interest in it, and the band of three drums, one kettle-drum, and a pipe played a running commentary upon it. They encouraged the players with cheerful strains at the onset, and celebrated every rally and every goal with a triumphant flourish.

"How long do they go on playing?" I asked.

"As long as your honour pleases," was the polite formula of the reply.

"Do you have a fixed number of goals for a game?"

"As many as your honour pleases."

“ Well, how long do they like to play ? ”

“ It will delight them to play till your honour gives the order for them to stop.”

“ And then will they go home ? ”

“ Then there will be a nautch if your honour pleases to order it.”

When we thought the ponies had had about enough we called for the nautch, and the players came in and formed a ring before us with the bulk of the people ; but a new lot of riders borrowed the ponies, and the game went on in the background, whilst the boys of the place also played one of their own on foot.

The nautch was much like that of the Gurais coolies, only



THE FOURTH DANCER AT ASTOR.

with the band instead of a singer and chorus. Some half-dozen men took their turn at amusing the company. They were all bashful, and had to be forcibly dragged into the midst before they would begin. Each opened with a slow step, and came close to the band, to which he gesticulated and postured with exaggerated distortions of countenance and gestures intentionally comic. The players never moved their eyes from the dancer's face, and took their expression from him, so that music and dance were entirely in accord

one with another. The fourth dancer, a tall wiry man well past middle life, was evidently the most popular. His coming was greeted with applause. He saluted the band from a distance with the air of an old acquaintance, certain of a good reception. He first expressed surprise by face and gesture, as who should say, "Well, I never expected to see you here." He paused, as though hesitating, then approached the band and entered into close relations with them. He became humorous, struck strange attitudes, and, keeping his head erect, moved it from side to side between his shoulders as though it slid along a slot. The crowd delighted in him and all his ways; they shouted their applause. Then he turned his back on the players and danced towards us, with a face full of laughter, arms raised aloft, and a birdish jerkiness in his movements. Rahim Ali looked on from a distance with the greatest contempt, but Jumma Khan, bound to be well in it on every occasion, had climbed on to the wall close behind the Raja, and was observing with much satisfaction.

A good-looking boy was next cast neck and crop into the midst and set a-dancing. He leapt forward like an entering ballet-girl and pirouetted around in large circles. His performance was more of a real dance than that of the others. He was coquettishly dressed in parti-coloured garments, and his white turban was carefully put on.

We presently made our excuses and went off to lunch, but we had to witness more *tamasha* of the same kind in the afternoon. When twilight came on, McCormick and I walked to the top of the mound behind the camp and watched the view fading away. The landscape was bathed in the exceptional haze that had lasted since we came from the pass, and was destined to endure for a week or two longer. A patchwork of fields lay at our feet, some fresh ploughed and violet in tint, others bright with young green shoots. Violet and green played together all over the view. Rocks and distant slopes were violet; the valley bottom was green. A violet tint even overspread the

distant snows. The soft air was motionless. The only sound was the muffled murmur of the river far below. We paused till darkness was at hand, and then descended to prepare, by a good night's sleep, for an early start on the morrow.



HUT AT KARRIM.



HARAMOSH FROM BUNJI.

CHAPTER VI.

ASTOR TO GILGIT.

April 30th.—The new set of coolies, starting from their homes, again displayed the usual dilatoriness, and wasted a couple of hours of the cool morning air. The men were shorter of stature, feebler of frame, more ragged and dirty, and altogether worse than those of Gurais. We had been led to expect the contrary. The Raja came and bade us farewell, and the tehsildar and his underlings accompanied us to Astor. There our *cortège* was increased by the officers of the garrison, the postmaster, and others. They salaamed on reaching the border of the country, and most of

them begged for chits, from the Raja's son down to the headmen of the little villages we had passed through on our way from Mikiel. It was thus nearly ten o'clock before our march was properly begun.

The path, at first high above the river, opened a view over great moraines and up the notable valley that leads by way of the Bannok La to Skardo. The dusty haze continued to fill the atmosphere, and all but obliterated the highest peaks within the range of vision. A precipitous hillside, or *parri*, forced the path to descend to the river's brink. We entered a striking gorge and followed it, with the water close at hand. The cliffs in some places rose so directly from the torrent that the path had to be carried on wooden galleries. This enjoyable portion of our walk ended at Harcho, where we rested awhile under a shady walnut tree, and wished we had arranged to lunch. We gave the coolies wherewithal to smoke. They made a hole in the ground for pipe, and contrived a tiny tunnel to it, through which they drew the fumes.

At Harcho commences the long traversing ascent which lasts during a march and a half, and finally lands the traveller on the Hatu Pir at a height of about 10,000 feet, a most discouraging method of going down a valley. Of course the slope was by no means continuous. The Liscomb valley mouth involved a descent, which it rewarded with the view of a pretty waterfall, but after that the way was all uphill to Dashkin, which is higher than Astor. As we mounted we reached the opener, wider sweeping slopes above the gorge, but what we gained in breadth we lost in picturesqueness and impending mass. By degrees the grandeur of the scenery impressed itself upon us, and ultimately I realised such a consciousness of size as I never experienced before.

Alpine roads often command views into valley-deeps a few hundreds of feet plumb, and Swiss footpaths are frequently forced by mountain-shoulders (in India they would be called *parris*) to ascend five or six hundred feet

before the obstacle is overcome. But in the Astor valley the stream is 2,000 feet and more below the road, and yet the traveller's position is not appreciably nearer the skyline of the lower heights. The valley is correspondingly wider, and this width, like the depth, soon becomes measurable by the trained eye. Any one so familiar with mountains as to understand the necessary proportion of parts to the whole will be able at once to appraise the scale at its proper size, if he can discover the measure of any one component feature of the view. Such measurable features are the fans of talus at the feet of gullies. When experience has been gathered of the nature of the rock, the rapidity of atmospheric denudation, and the sort of normal size of the average fallen stone, a mere glance at one of these fans reveals its magnitude. The length of the gully follows, and thence the scale of the mountain mass in which it is furrowed. Thus it was that, as we kept ascending the western slopes of the valley, we came to perceive the magnitude of the eastward hills, and so of the entire mountain panorama. A titanic mass was over against us; a buttress of what I shall call the Bannok group, from the well-known pass that traverses it.* Its roots spread abroad from opposite Dashkin as far as Astor, and it was visible at one time in all its breadth and height. Its rocky slopes are not specially steep, but they are utterly barren, and its summit is a needle point.

How hungry we were when at four o'clock we reached the rank and fly-infested camping-ground of Dashkin! Most of the coolies were far behind, but Rahim Ali promised a swift meal of tea, eggs, chapattis, and jam. Never was anything more acceptable. The instruments being read, and the tents pitched, we fell upon the food. Jumma

* This group of mountains is bounded on the north and east by the Indus, on the west by the Astor river; the Alumpi La and valleys leading to it may be adopted as its approximate southern limit. Its highest point is apparently the Dichell peak (U 27), at the head of the Dichell nala—a mountain over 19,000 feet high.

Khan thrust a salt-box into my hand. "What is this?" I said. "Protector of the poor! for the eggs." The afternoon was over almost at once, and when the flies went to sleep so did we.

May 1st.—The coolies were as ready to start this morning as they had before been slow. We were accordingly on the way by half-past five, and continued to traverse the valley at a great height, and constantly to increase our distance from the stream. The thick haze haunted us as before, spoiling all distant views and blotting colour out of the landscape. Clouds rested upon the summits, which



DASHKIN.

was the more untimely, as this march commands notable views, not only over the Bannok group, but also back in the Nanga Parbat direction. The slopes we had to traverse were covered with masses of *débris*,

and stones are always falling across them. The path is in constant danger of obliteration, and has to be frequently repaired. Sometimes, I was told, the whole hillside seems to be on the move. It is for this reason that the road must be carried so high. The mountain is rotten. From the west side of this same mass (three miles south-west of Hatu Pir), the great fall took place in 1841, whereby the Indus was dammed up for about six months, and the Bunji valley was turned into a lake. When the dam broke, ruin rushed with the waters down the Indus, and spread abroad over the plains far away.

For a mile or two the *débris* slopes yielded to a charming region, clad with a forest of the edible pine, and, later in the year, carpeted with flowers. Wild strawberry plants abounded, and there were rose-bushes on every side. We surveyed with interest the famous sporting nalas—Dichell, Bardicha, and Shaltar—opening on the far side of the Astor river. As we left the forest and rounded the next spur, the great Dichell peak was disclosed to the eastward, and we could have looked up at it in long content from our lunching ground at Trubyling, if the clouds had but consented to roll away. As it was, we saw it only by pieces at a time.

After an hour's halt we continued mounting and traversing as before to the angle of the next rib, which should have rewarded us with a finer panorama than any previous station. We just caught a glimpse of the Indus far below near Bunji, and round to the left surveyed an amphitheatre of



THE GREAT DICHELL PEAK.

slopes, resting against the Hatu Pir to the north, and with the Doian villages and fort in its centre. Rakipushi (25,550 feet) ahead, and Nanga Parbat behind, were alike blotted out by clouds. Hatu Pir is the name for the last point of the mountain promontory which juts northwards from Nanga Parbat, and divides the Astor from the Indus valley. Our road from Astor traversed the eastern slopes of this promontory.

A rapid descent of some 300 feet brought us to Doian Fort, beside which the tents were already pitched when we arrived at one o'clock. The long afternoon was all too short for the arrears of writing I had to work through. We were

visited by Mr. Appleford, who was in charge of the difficult road-making operations going forward in the neighbourhood. The new road from Doian descends to the Astor river by zigzags, and all the lower part must be blasted out of the rock.* Six hundred Pathans were engaged on this portion of the work. Appleford took part in the Hunza campaign, and gave us an interesting account of it. He said that the haze which so annoyed us had prevailed for more than three weeks at Doian. It was regarded by the inhabitants of the country as quite unusual. They affirmed that the season was the most advanced that

any one could remember. There was no snow for some thousands of feet above our camp, though in ordinary seasons beds of snow remain even below Doian till the month of May. Appleford, who spent the previous hot weather in



VIEW FROM DOIAN CAMP.

this district, stated that, from what he had seen or been told, it seemed a general rule that there were repeated intervals of fine weather in the Nanga Parbat neighbourhood during the rainy season. Probably, therefore, this mountain and its neighbours can be as well attacked by mountaineers in July or August as in the unbroken fine weather of the two or three months of shorter days and cold nights that follow.

* The following plants were gathered between Astor and Doian :—*Tulipa chrysantha*, *Mertensia echioides*, *Asperugo procumbens*, *Androsace rotundifolia* var. *Thomsoni*, *Senecio coronopifolius*, *Valeriana Jäschkei*, *Ribes orientale*, *Cotoneaster nummularia*, *Cerasus Griffithii*, *Viola Patrinii*, *Chorispora sibirica*, and *Draba stenocarpa*.

Astor can be reached by the Gilgit road in a month from London.

May 2nd.—The path from Doian could not at once forsake its long habit of mounting the hill by way of going down the valley, but we had only a short traverse to make, and by half-past eight o'clock reached the little col, close to the point called Hatu Pir (10,254 feet). On our way we noticed several subsidence hollows of considerable size, and some grassy shelves likewise formed by the internal yielding of the mountain. The ground was fissured and irregular, and signs of disintegration on a large scale were everywhere apparent. Some day there will be a big landslide here, and perhaps the Indus will be blocked up again. Near the top flowers became more frequent, and we stopped to press them.* Whilst McCormick and I were thus engaged Parbir passed by, gaily whistling. His coat was hitched through the belt of his forage sack, the wings of his waistcoat flapped about in the breeze, Bruce's gun was slung across his back, his blue umbrella was tucked under his arm, and he carried an ice-axe on his shoulder; his head was crowned with his own cap, and Zurbriggen's tope above it. There was always a cheery moment when Parbir came along.

When we emerged on the crest of the ridge a wonderful view burst upon our gaze, and that notwithstanding the mist that swallowed up the distance, and the clouds covering Rakipushi, Nanga Parbat, and the Dichell peak. The notable feature was the Indus valley, coming end on towards us from the north, bent at right angles, when, after receiving the waters of the Astor river, it had swerved past us, and so going away westwards into Chilas. I had never seen any valley that compared to it either in kind or dimensions. It was barren as an Arabian wady; it was floored with the strewn ruin of countless floods,

* The following plants were collected near the top of the Hatu Pir :—*Physochlaina præalta*, *Artemisia maritima*, *Valeriana dioica*, *Saxifraga Stracheyi*, a variety of *Caragana tragacanthoides*, *Capparis spinosa*, *Cochlearia Conwayi*.

bleached and blasted by the suns of countless summers ; it was walled along by rocky cliffs, a maze of precipices and gullies, untrodden of human foot, bare of vegetation and almost of *débris*. The river wound through it in a gorge, cut down into the alluvium. The waters resembled a twisted blue ribbon, dusted with white here and there where there were rapids. It was hard to believe that we were gazing at a rushing river two hundred yards wide, so far was it below us. It looked like a sluggish stream that a horse might have leapt. The scale of things had taken another increase, and our eyes required a further adjustment. The beautiful Dubanni, on the whole the most beautiful group of snowy mountains we ever saw, blocked up the end of the valley. We marked where the way to Gilgit branched off to the left. Through the faint mist, now that the sun was shining, the elemental rocks glowed with every tint of purple and grey—the colouring of Egypt with the sky of Greece. Only two patches of green could the eye discover in all its wide range—the tiny oasis of Bunji far away and the few fields of Taliche, like a little carpet, forgotten on the rocks by the border of Chilas at our feet.

McCormick and I spent an hour and a half examining and photographing the remarkable scene. Then we turned our backs on the world of life and plunged downwards into the desert. For two hours we bumped and slid and tumbled over the broken path. A loud whiz passed close to my ear ; I dodged and looked for a falling stone, but the thing had been a lammergeier plunging from the upper air on business of importance. It vanished round the corner below, like a flash of black lightning, and we saw it no more. The new road will avoid the top of the Hatu Pir and the steep descent, but it will also rob travellers of one of the most marvellous prospects to be seen in the mountains of Kashmir.

Our swift descent brought us up with the rest of the caravan before we reached the bridge spanning the Astor

river at Ramghat. The Kashmiri sepoy's stationed at the fort entertained us with all the hospitality within their power, and we rested for awhile with them till the coolies came up. Then we crossed the bridge, and walked a mile to the camping-ground by the bank of the stream that drains the Dachkot nala. We lunched whilst the tents were being pitched. I said good-bye to the others, and rode off for Bunji on a pony, kindly sent for me by Captain Kemball, of the 5th Gurkhas.

I rounded the corner in a few yards and was out of sight of my people and of every trace of man, save the track along which I was riding. A moment or two later I entered the Indus valley, and was traversing the foot of its eastern slopes. Wastes of stone and sand surrounded me; in front was the "sunburnt and sorrowful" valley, going away to the veiled mountains of Nagyr; *débris* reached up to a rocky skyline on my right hand; on my left was the flowing Indus, and beyond it the rock-wall of Gundai, ten thousand feet in height from stony foot to splintered crest. It was like riding alone among the mountains of the moon. Now and again I passed the mouth of some uninhabited valley leading to unnamed fastnesses and watched by unstoried peaks. I felt no eagerness to climb these elemental lumps. No human being ever cared for them. No homestead ever timed its risings and its restings by the pink sunlight on their crests. No tales were ever told about them. Unnoticed, unnumbered, and unnamed, they have performed their function in the balance of the world, but without awakening the imagination of man or kindling his emotions.

One striking peak almost engaged my fancy. It was a mere 16,200 feet high. An undulating snowfield leads to its easy summit, but this white plateau is cut off on all visible sides by plumb-vertical walls, 2,000 feet high at the smallest computation. A rock arête, broken into a series of mighty teeth, alone leads up to it, and where arête and plateau join there stands a pinnacle of rock, the

sharpest and most uncompromising I have ever beheld. Yet who would care to reach this well-guarded summit? It is low for these regions. It is nameless, of course, one amongst thousands of the like unknown. The very inhabitants of Bunji have not noticed it, though it stares down upon them. It is the goal of no one's aims. It looks abroad over a region mostly uninhabited and almost wholly barren.

A man coming into a land so new and strange is stricken and overpowered by the impression of the whole. He has



ONE OF THE GUNDAI PEAKS, 16,200 FEET.

no time to contemplate details with the lingering attention that makes the attainment of this or the other point seem desirable. It was the broad western wall in its entirety — the vastness and nakedness of the thing — that imposed itself upon my imagination. Here was Nature working out her own will unhindered and unhelped by man. Few piles of *débris* veiled

even the bases of the rocks; no earth or grass found lodgment upon their ledges. The naked skeleton of the world stood forth, with every stratum displayed and every mark of the sculpturing chisel undisguised. Effort was not needed to trace the contortions of the rocks or the thick veins of quartz that knit their cracks together. A band of lighter colour, more than 1,000 feet thick, was bent like a bow by the pressure of the world. At one end it stood up vertically, and its edges jutted into the air as the crest of a peak; the other end reached the skyline

lower down some three miles away. Further on was a slope of rock. Smooth it seemed like a schoolboy's slate. It was tilted up at a high angle, and measured perhaps 1,500 feet from bottom to top. The remnants of a landslip lay against its base, and slightly turned the course of the river. What a fall it must have been! The waters, however, are carrying off the rocks, and the place will some day be swept clear of the mighty ruin.

As I rode alone musing on the wonders of this solitude, two weird figures turned a corner and stood before me. One carried on his shoulder an Afghan sword and an umbrella; the other had a double-barrelled gun and followed a pace or two in rear of his comrade. Their clothes were dust colour, and they wore purple turbans. They halted and surveyed me. I regarded them as in a dream, for the bit of colour they lent to the landscape brought the whole into a new key. There

was a fine unfriendliness in their look. With one consent we paused and gazed at each other in silence, as though mutually mesmerised. Then we resumed our respective ways, they to the south, northwards I, towards our respective Infinities, which, maybe, will hereafter



ON THE ROAD TO BUNJI.

prove to be the same. Another mile and I was in the midst of a gang of Pathans working on the road. They paused in their stone-heaving to inspect me, and responded to my salutation with friendly grins and uncomprehended greetings. A liking for the fellows sprang up within me; heart had spoken to heart, and the senseless rocks were forgotten. Assuredly few or none are they who love Nature for herself. The true quickener of emotion and awakener of thought is Nature the background and abode of man; Nature the vehicle or subject of human intercourse; Nature the analyser of the human mind.

Absorbed in such reflections I found myself on the verge of a wall-sided nala which had to be crossed. The only approach to its depths was by a narrow and stony path, steep as a staircase. Beyond the nala stood Bunji (4,631 feet) amongst mulberry-trees; a bugle was sounding a familiar call. Fresh breezes swept up the valley and raised a pillar of dust high into the air where an eddy of cloud descended to meet it. The pony picked his way easily down the forbidding track; then of his own accord galloped across the flat, gaining an impetus which carried him some way up the ascending path on the other side. Fields and burial grounds remained to be traversed. The Kashmiri sepoy was just dismissed from parade, and one of them led me to the mulberry grove surrounding Kembball's bangla where my tent was to be pitched. Bruce and Roudebush were awaiting me. A glass of foaming beer was placed in my hand. Oh, shade of Borrow! surely in that blissful moment thou wast not far away!

"But Zurbriggen—where's Zurbriggen?"

"Gone off shooting in the Damot nala. He'll soon be back now."

"Which way will he come?"

"Up the hill there. Why, there's some one coming now. Perhaps it's he."

"No, it's a native carrying something. By Jove! it's a head—a fine pair of horns!—a markor!"

The coolie deposited the trophy at our feet, a very fair head of this much sought wild goat. The horns were 40 inches long and well curved—a good average pair such as anybody might consider himself lucky to get in his first half-day's shooting. Ten minutes later Zurbriggen himself came in, radiant with satisfaction. He was wearing a soft woollen turban that suited him admirably. We spent the rest of the day talking and eating mulberries. I went early to sleep in my tree-embowered tent.

May 3rd.—The Indus valley in the Bunji reach is to be pictured as broad and flat-bottomed. Its western side is a mighty wall of rock. On the east it is bordered by steep slopes. The slopes and the wall must meet not less than 500 feet, and probably as much as 2,000 feet below the level of the surface of the *débris* accumulations which fill the valley. By what processes were these vast *débris* accumulations brought together? The problem is of general interest, for the Bunji valley may be regarded as typical of Central Asian valleys generally, and what is true of it is true also of the Pamir valleys and of those in the regions of Western Tibet and Eastern Turkestan.

In the milder regions of the world it is correct to regard the river that flows through a valley as the principal agent both in cutting it down and in filling it up. The waters, moving gently, deposit upon their beds the stuff they carry. Banks are formed, and the river from time to time changes its course. By such processes the bed of the Nile is being continuously raised, but the features of Asiatic mountain valleys cannot be thus accounted for. The component elements of the *débris* are too large to have been thus habitually transported from afar. A bursting lake may occasionally carry to great distances enormous masses of ruin, but such events are rare, and it is clear that the valleys have not been filled by the agency of bursting lakes. The gentle dip of the bedding of the *débris* towards the river proves that the stuff came from the side slopes. Now and again, no doubt, mountain falls, or upheavals and depressions

on a large scale, have produced lake-basins in the valleys. Such basins tend to be silted up. The mud, which swiftly-flowing water can carry, soon settles to the bottom when the water enters the broad area of a lake; banks are formed near the point of inflow, and the length of the lake diminishes till such time as the whole is filled up or till the barrier that causes the accumulation of waters is cut away. Deposits of this kind are to be seen in many places throughout the Central Asian valley area, but they are seldom large or indicative of any long duration of the conditions under which they were formed.

Regarding, then, as certain that the *débris*, filling such valleys, came from the side slopes, the question arises—How was such a quantity formed, and caused to descend? Here the reader must bear in mind the nature of the climate in the regions under consideration. It possesses two main qualities—extraordinary dryness and extreme and rapid variation of temperature. The rainfall is trifling over the whole area, except where the mountains reach great altitude, and there snow is precipitated in considerable quantities. The alternations of temperature are remarkable. The thermometer at heights of 15,000 feet ranges as high as 80° Fahr. in the shade during daytime, and will descend at night to freezing-point. Very low temperatures doubtless occur in winter. Such changes break up rocks with extreme rapidity, as has been noticed all over the world. Keane * and other Arabian travellers have described how, on a cold night following a hot day, rocks are often heard loudly cracking and splitting up. Alternate expansion and contraction of ingredients of different qualities not only break large masses of rock, but tend to disintegrate their parts. Thus, throughout all the region we are considering, there is continually being provided a mass of loosened *débris* such as is never found in the better-known mountains of Europe. The traveller constantly sees and oftener hears the falling of stones down slopes, and, when one of them

* J. F. Keane, "Six Months in the Hejaz."

starts, it does not long pursue its headlong career without making fellows to accompany it.

The reader will have seen railway embankments in process of construction. Trucks succeeding one another cast stones down the advancing slope, which always maintains the same angle with the horizon, an angle determined by the nature of the stones composing the bank. If the slope were steeper than the angle of repose the stones would be in more or less unstable equilibrium, and they would ultimately fall about till the slope became reduced to the proper angle. It is impossible by merely allowing stones to fall down from the top of the slope to diminish its angle. Similarly it is with *débris* fans. If the *débris* falls dry from the hillside it will lie at a given angle below, and no less. If a *débris* slope is found, whose surface makes a less angle with the horizon than the normal slope of fallen mountain material, the conclusion follows that something else than the mere tumbling of dry stones has been at work.

Let us assume that dry stone *débris* will not adjust themselves, by falling, to a less angle than one of 15° with the horizon. They can yet be carried down a gentler slope by the flowing of water. A fan, therefore, that is formed by water-borne stones may have a surface inclination of less than 15° . The angle of such a slope, however, cannot be less than some minimum, and we shall be well within the mark if (for ordinary stone *débris*) we put this minimum at 10° . But the great *débris* fans and valley accumulations of the area under consideration have a surface slope far less than this. The slope of the lowest four miles of the fan at Leh—that is to say, between the town and the Indus bridge—makes an angle of only $2^{\circ} 43'$ with the horizon. Stone *débris* cannot be systematically carried by mere water down so trifling a slope as that; another carrying agent must be sought. That agent was doubtless mud.

I maintain that the *débris* accumulations which fill up to so remarkable a depth—sometimes as far possibly as 10,000

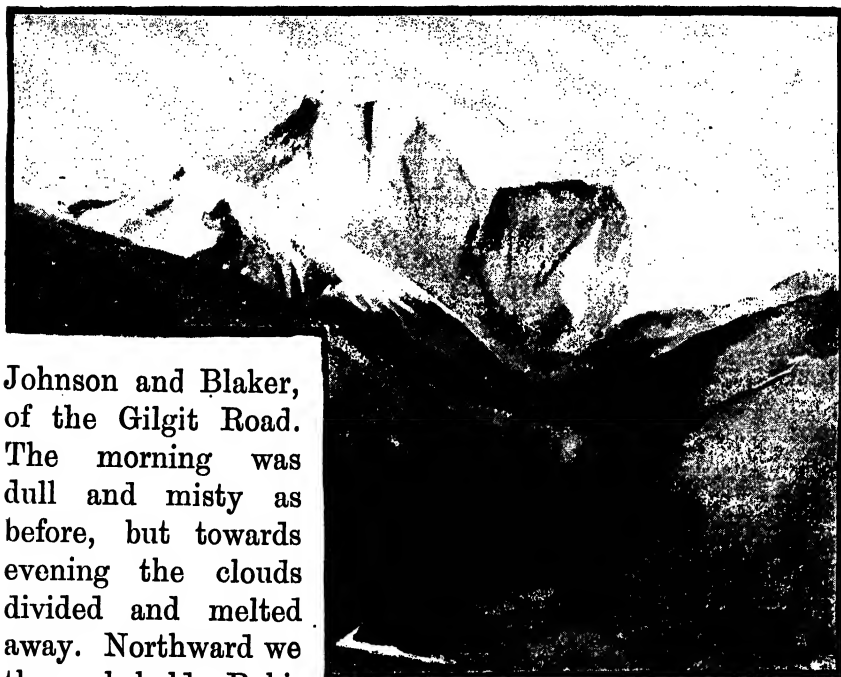
feet—the desert valleys of the Central Asian mountains, have been deposited by mud-avalanches. One such avalanche we saw falling on July 8th, as the reader will hereafter find. Sir William Lockhart described to me another that he saw crawling over a fan close to Baltit, the capital of Hunza. Colonel Godwin-Austen saw one below the Skoro La. Such frequent phenomena in these regions are they that it may be broadly asserted of every gully, reaching up to the snow level and traversing a suitable slope of dry rocks below, that it discharges one of them annually. If they fall faster than the main valley torrent can carry them away, they raise its bed and begin the filling of the valley. They soon force the river into a gorge. The process then continues with increased rapidity, the avalanches piling themselves up on the sides of the gorge. As the *débris* accumulations increase in depth, the slopes, from which the supply of rubbish comes, are gradually covered up, the supply thus ultimately diminishes, and finally becomes insignificant. This is the stage which has been reached in the broad, almost filled-up valleys, misnamed plateaus, of the Pamirs and Western Tibet.*

Owing to the structure of the mountains forming the sides of the Bunji reach of the Indus valley, the mud-avalanche supply has come chiefly down the eastern slopes. To the west are mere precipices of rock on which neither snow nor *débris* accumulates. The river has therefore been forced over to the west, and the *débris* flat is along the east margin of the stream. Here the waters of a side nala have been captured and led into a system of irrigation canals, whereby a portion of the desert area—some square mile in extent—is made to flourish exceedingly. This is the oasis of Bunji. As, under English rule, the country becomes more settled, and all fear of Chilasi raids is done

* The higher beds of the upper tertiary Sinalik series of rocks, which flank the south foot of the Himalayas, consist of coarse conglomerates near the places where the rivers emerge from the hills. These conglomerates were doubtless formed out of mud-avalanche *débris*.

away with, the number of these artificial oases will be greatly increased between the Hatu Pir and Gilgit, as well as in various minor valleys. A large population may then be supported in what is now an almost uninterrupted desert.

Such were some of the reflections that occurred to me during a quiet day spent under the hospitable roof of Captain A. Kemball, of the 5th Gurkhas, and Messrs.



NANGA PARBAT (26,680 FEET) FROM BUNJI.

Johnson and Blaker, of the Gilgit Road. The morning was dull and misty as before, but towards evening the clouds divided and melted away. Northward we then beheld Rakipushi, lifting high his silver spear, with the many-pointed mass of beauteous Dubanni on his eastern flank, and a white outlier of Haramosh further to the right. But southward was the great view. There the clouds played at hide-and-seek with majestic Nanga Parbat, and presently ran away, disclosing the whole wonderful mountain from its then unexplored base in Chilas, which the hidden Indus washes, to its long and splintered crest. To sit and watch the evening light upon 16,000 feet of ice and snow was a pleasure granted

to few; we enjoyed it to the full in silence and amazement.

One thing, however, we were not permitted to behold—the crystal castle on Nanga Parbat's crest. The natives say that it can be seen from afar, and they call it Shalbatte-kôt. Did not a certain *shikari* once climb to it, on the very summit of the peak; and did he not find therein countless snakes? * Let the man that doubts go and repeat the ascent and bring down word, that all may know the truth.

May 4th.—This day our recently united party had again to break up. Bruce, Zurbriggen, and I started for Gilgit, Roudebush went to pursue markor in the Burme nala, the others remained behind at Bunji till they should be sent for. It was nearly seven o'clock before we were on the way, but the morning was cool and clear, and Nanga Parbat saluted us in unclouded splendour. The desert foreground was an admirable setting to the brilliant mountain mass, which looked so glorious in robes of white that for a moment we were half inclined to change all our plans and go back to attempt the ascent. No extraordinary difficulties other than those pertaining to the altitude and the state of the snow appear to bar the way. The best line of attack would probably be to reach the snow col west of the point 22,360 feet, which we named the Sphinx; pass over, or round, the south side of the shoulder 23,170 feet, and mount an easy snowfield or slope to the east end of the long but gentle rocky arête which ends in the summit.

We walked for nearly two hours in the cool air and shadows of the hills. Then Roudebush left us and bent away to the right, and we, going leftwards, entered the broiling sunshine and approached the Indus at the point where the bridge was being built. We met Johnson riding back from the works with his dog behind him, and a cloud of dust kicked up from the soft sand which we

* "Ausland," 1875, p. 689.

were already tired of wading. He halted to bid us good-bye, and the dog bolted into the shadow of a rock, from which, when his master rode off, he hesitated to stir, but sat on whining and howling at the heat till he dared wait no longer.

It was nearly ten o'clock before we reached the splendid gorge which the bridge is to span. We were met by Mr. Maynard, the resident engineer, who invited us to his tent, where, with the generosity of our countrymen on the frontier, he poured out for us what we afterwards discovered was his very last bottle of divine nectar. The temperature in the shade was already 88° Fahr.; in the sun it was anything you please, so we naturally prolonged our halt on easy excuses. We discussed the work at the bridge, and the difficulties which carriage of materials over the passes—great chains and what-not—was destined to present. We talked of the mixed crew of workmen employed on the excavating and masonry, and their high rate of wages. Maynard told us that, though the masons came from the Punjab, the heat at Bunji during the three hottest months was too much for them, and work had to cease. The time for closing was near at hand.

It was no use to blink the fact that we had to be moving on, so about eleven o'clock we started off again into the blazing heat. We were only 4,600 feet above sea-level. At every step we sank into the sand or stumbled over stones. We descended to the river and were ferried over it by Captain Aylmer's floating-bridge. We were surprised to find the water so broad and deep, and flowing with such silent and impressive speed in the wild gorge. A toilsome ascent on the other side reduced us to feebleness in half an hour. The sun blazed on us from the right, and hot rocks roasted us on the left. It was a relief to turn the corner and enter the Gilgit valley, whose green stream joined the brown Indus at our feet.

For the remaining three hours and a half of the march we plodded along through a region as barren as the one

just left and as hot as fury. Before us stood a distant snowy peak; behind, I know not what, for memory and observation were blotted out. We waded through the sand and endured, thinking only of water, longing unutterably for it, but there was not a drop to be had save from the dirty river flowing inaccessible below in a gorge 300 feet deep.

We halted awhile in the welcome shadow of a great rock which others had used before us, for the loose stones were removed from the shadowed area and piled about it. Two natives were already in occupation, travellers from Kohistan on their way to Gilgit. "How far is Damot?" they asked; "this side or that side of the river? How far Bunji? Are there Baltis at Bunji? Many of them?" and so forth. And we, "Where does the sahib (Wilkinson) live? Is it far on?" We sent the younger man down to the river to fill my bottle with muddy water, which we eagerly drank. The elder then borrowed the bottle and sent it for a drink for himself. They seemed decent fellows enough; they had fine, characteristic faces and long taper finger nails.

The brilliant sunshine and clear air cast a blue mantle about the hills the like of which we had not lately beheld. The local colours of the various beds of naked rock in the nearer slopes were plainly manifested by the bright light. We could observe these things whilst we rested, but, once on the way, observation ceased. We wished we could go like Bruce's dog Pristi, a cross between a retriever and a Gordon setter. He had already picked up the trick of Johnson's dog and went bolting from the shadow of one stone to that of the next; but there were no rocks big enough to cast shadow over a man.

At last, about half-past three o'clock, we reached the place called Big Stone and found Mr. Wilkinson, the road engineer. He received us hospitably in his tent, the only shaded place about, and served at once the water we craved for and thereafter the food. The shade tem-

perature was 90°. We rejoiced when the sun went behind a hill and the myriad flies ceased from their excessive troubling. As night came on we were called to Wilkinson's hospitable board, but the food would have tasted of another sauce than it did if we had known, what was the fact, that he was clearing out for us his entire reserve of tinned provisions. The moon shone brilliantly, and the larger stars twinkled around her. Such perfect stillness reigned that the naked candle did not flicker in the open air. The only sound was the muffled murmur of the river's flow. How tired we were from the stony and sandy ways and the blistering heat! The needful work of instrument reading and photograph-film changing was quickly got through, and I followed the others into dreamland at an early hour.

May 5th.—The lesson of the previous day was not lost upon us. We were off by half-past four o'clock and found the first two hours of our walk most agreeable; nor was it with any feelings of apprehension that we watched the dawn, for its beauty made us forget all else. The tip of the Bunji peak, away behind us, glowed like a mass of iron newly drawn from a furnace. From time to time we gained impressive glimpses up side valleys; but soon the heat was upon us, and, with the rotten path, occupied all our attention. The longing for water grew in us again, and everything else was forgotten. The river below was swollen by the rapid melting of the snows. It was blackened with mud, and a wineglassful would have been opaque. At ten o'clock we approached the green oasis of Minawar and passed a resolution to rest there till the cool of the afternoon. To get to it we had to cross a nala, and its foul pools seemed full of nectar to our depraved taste. We drank deep draughts from them and filled ourselves with mud. Then we sought the delicious shelter of the mulberry trees. There was grass to lie upon, and a runlet of poisonous irrigating water from which to drink. The temperature seemed chilly by contrast; it was 84° Fahr.

The servants made tea, and the natives brought us about eight gallons of mulberries, which we devoured by handfuls. Then we lay down, covering our faces to keep off the flies, and so went to sleep.

The Minawar oasis, like all the others, is formed by irrigating an old mud-avalanche fan with the stream that made it. The gentle slope up one side of a fan and down the other forms an unsuspected element in the toil of a journey on foot through these regions. From a distance the fans look so flat that one is surprised to find how much the labour of walking in sand and loose pebbles is increased by a slope scarcely perceptible to the eye. All the fans in the Gilgit valley might be, and some day will be, rendered fertile by irrigation.

About four o'clock, when the cool of the day should have been beginning, but when, as a matter of fact, the heat attained its maximum, we set off to accomplish the rest of our march. We leapt down from one terraced field to another, and so reached the edge of the oasis and emerged on the sand again. Down one long slope, up another, then down its further side, hot rock walls on either hand—thus we journeyed at our slow, best pace, leaving the long miles (never were miles so long!) one by one behind. At length the sun went behind a hill, and we could look about once more with alert intelligence. Rakipushi (25,550 feet) was displaying his southern face at the head of the Dainyor nala. The south-south-west arête seemed to offer an easy route to the summit, but we presently discovered that all access to the ridge was cut off by an unbroken series of avalanche slopes, which, however, may become safe enough in August. Our hopes of beginning with this ascent were thus not a little damped, but the brilliant colouring lavished on the high peaks by the setting sun was for the time satisfaction enough, and with renewed delight we discovered, away to the east, the sharp point of great Haramosh flaming like a gilded spear-tip above the rampart of the nearer ridges.

The moonlit, star-bespangled night enveloped our approach to the fields and scented groves of Gilgit. How glad we were to feel cultivated land once more under our feet, and to tread paths not deep in sand nor littered with painful stones! We burrowed into the dark shadow of mulberry trees, but still the fort and houses of Gilgit lingered. We left cottage after cottage and field after field behind, but there was no sign of a sahib's bangla, only fields, and evermore fields, and groves before us. We encountered a witless native.

"Where does the Colonel Sahib live?"

"Don't know."

"The Colonel Sahib—Durand Sahib?"

"Don't know."

We shook him by the shoulders.

"Salaam!" he said.

"The Colonel Sahib—where does he live? Are you asleep?"

"Salaam!"

"Where are the tents of the sahibs? the English?"

"Salaam!"

"Ass of Gilgit! Where is the fort?"

"I have never seen a fort or sahibs. Salaam! I know nothing."

A few minutes later another native was found.

"Where does the Colonel Sahib live?"

"That way."

"How far off?"

"Not far. A little way."

"A mile?"

"Yes, a mile."

"Perhaps two miles?"

"Yes, two miles."

"Out with it, man! how many miles?"

"As many as the sahib pleases."

At last we saw lights ahead, then tents on the one hand and a bangla on the other. We turned to the left through

a field of growing corn and found ourselves at the door of the mess. Friendly hands and voices greeted us. Our



'SALAAM ! I KNOW NOTHING.'

fatigues were at an end. Food and drink were placed before us, and we dined with keenest satisfaction. We soon betook ourselves to the tents prepared for us, and

had only time to notice that trees were rustling overhead, blighted or over-ripe mulberries pattering on the roof, and water rippling close by, before kind sleep descended and blotted out the moonlit grove and its phantom inhabitants.



BRUCE SAHIB KE WASTI !



THE BARBER AT GILGIT.

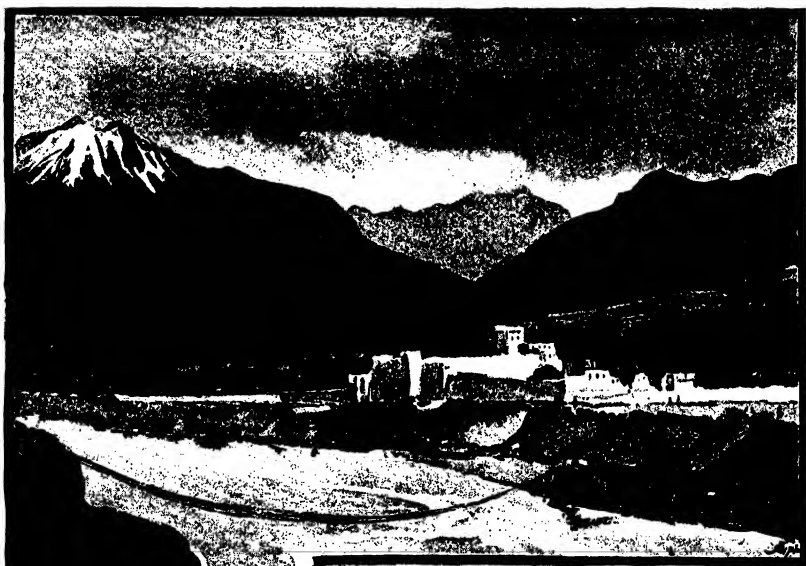
CHAPTER VII.

GILGIT TO DIRRAN.

May 6th to 10th.—We remained five days at Gilgit (4,890 feet), five delightful days, enjoying the kindness of our hosts, the novelty of our surroundings, and the satisfaction of repose. They were not days of idleness. Our plans had to be overhauled in the light of such experience as we had acquired, and of the valuable information willingly placed at our disposal. Some of us were entertained by the Residency, others by the Garrison Mess; and let the reader understand that, in the narrowness of their remaining supplies, such entertainment was no small matter to them or us.

On the morning after our arrival I called on Colonel A. G. Durand, the British Agent. It was delightful to be in a house again and in one so artistically adorned. Few English homes manifest a more harmonious arrangement of

colour than did the Gilgit Residency at the time of my visit. The unexpectedness of such an effect added to its charm. The only officer of the Agency in residence, beside Colonel Durand, was Surgeon-Captain Roberts, an old acquaintance of mine. Captain Twigg left the day we arrived. The officers of the garrison were Lieut. Boisragon (whom I afterwards saw invested with the V.C. for his bravery at Nilt) and Lieut. Badcock, of the 5th Gurkha



GILGIT FORT FROM THE NORTH-WEST.

Rifles; Lieut. R. St. G. Gorton, R.A., who was wounded before Nilt, about the same time as Colonel Durand; and Lieut. F. Duncan, who was acting as transport officer. The bulk of the garrison consisted of the Maharaja of Kashmir's Imperial Service troops—a fine body of men.

We remained encamped in the Bagh near the grave of the murdered Hayward.* The Residency and Mess were

* G. W. Hayward; killed at Darkut in Yasin, July 18, 1870. See Drew's "Jummoo and Kashmir," p. 455.

close at hand. I believe there was much playing at hockey, polo, and the like, but of all this I saw nothing, for a day's illness of a violent and peculiar sort, that came and went away with extraordinary suddenness, filled up all the time left over from necessary business.

Gilgit had been described to us, and on the whole justly, as an almost rainless place. Nevertheless, the day after we arrived, the sky was thickly covered with clouds; heavy rain fell at intervals during our stay. There was then no proper Government meteorological observatory at Gilgit, but Roberts was doing what he could with such equipment as was available. He measured the rainfall from Sep-

tember 18th, 1891, to May 10th, 1892. It was 2·65 inches. The only rainless months were November, December, and January. He has since been instrumental in establishing a



LOOKING UP THE VALLEY FROM GILGIT.

properly equipped observatory, which will form another important meteorological outpost towards Central Asia.

To our three Gurkhas from Abbottabad was now added a fourth, Karbir Thapa by name, also a sepoy of the first battalion of the 5th Gurkha Rifles. One or two details of their equipment were missing, and Bruce endeavoured to supply them from the stores. The Babu's answer to his application is worth record :—

“SIR,—The bearer has looked in the stores. He says they are all worst and into pieces. I have, &c. (signature illegible).”

The mountains we were going to explore had not escaped

the attention of the Kashmir Government. It particularly desired to investigate the Nushik pass, which leads to Nagyr from Baltistan. Explorations of this pass were more than once attempted; the most serious being undertaken by their officer, Major Devi Singh. It was considered advisable that he should meet us, and we ultimately arranged for him to have an opportunity of doing so. If I remember right illness prevented him from accompanying us any part of the way. Wazir Nazar Ali of Kapalu was another native who was believed to possess some knowledge of the Baltistan mountains, and to be the depository of traditions with respect to them. He was sent for to join us, and ultimately accompanied us to Hispar and went over the Nushik pass with Bruce. I met him again at Askole, but found his information valueless when put to the test.

Notwithstanding the relatively advanced state of the season, it was evident that the high mountains would not come into a condition suitable for serious ascents for a month or more. Still it seemed not impossible that passes might be crossed. There was a saddle marked on the map, which attracted my attention in England. It is situated on the main chain east of Rakipushi, and is about 17,500 feet high. If we could force a passage over this it would take us to Nagyr by a direct route, and would enable us to make intimate acquaintance with great peaks. The glacier leading to the pass lies at the head of the Bagrot nala. We determined, therefore, to begin our explorations by ascending that valley, and at all events surveying the glacier area within it. That would give useful occupation for two or three weeks without taking us any great distance from a well-furnished base.

We spent the last day of our visit in seeing such sights as Gilgit affords. Truth to tell they are but few. There is an ancient figure of Buddhist origin carved in relief on a rock wall in the neighbourhood, but the photograph of it, which I saw, sufficed to deprive me of any anxiety to see the thing itself. It is the feeblest example of sculpture, and not

necessarily of any great antiquity. The situation of Gilgit has always rendered it an important point, for so many ancient routes converge upon it. Travellers and traders coming from Central Asia, whether from the east or west sides of the Pamirs, are naturally led to this place. The several passes that converge upon Hunza lead ultimately to Gilgit, and so do those that give access from the north-west to Yasin. If, therefore, at any time there should come a period of peaceful industry and of good fellowship between the peoples of Central Asia, Kashmir, and the Indus valley—and who shall say that these happy results may not be brought about, even in the near future?—Gilgit must grow to be an important trade centre, and possibly, to take a wild leap of imagination, a railway junction on the line from India to Kashgar, where the Samarkand branch will turn off! At present there is practically no commerce passing through the place, and its chief interest to India lies in its strategic importance, which cannot well be overrated. If lawless Hunza-Nagyr, Yasin and Chitral, Chilas, and the Indus States are to be kept in order, the power that undertakes, or has the work forced upon it, must hold Gilgit.

May 11th.—We packed only twenty light coolie-loads of baggage for Bagrot, and those went off the previous evening. After a night, which was of the shortest, we rose at four o'clock, and prepared for the way. Every one had been ill during our stay at Gilgit, and Eckenstein was too bad to start, so we left him in Roberts' hands. Zurbriggen was about equally ill, but he insisted upon hastening into better air, and was permitted to accompany us. Dickin had already gone off to shoot in a neighbouring nala. Durand and Roberts kindly placed ponies at our disposal, and we rode away about half-past five o'clock. The morning was dull and grey; all the higher summits were covered with clouds, which, in a European sky, would have threatened every kind of storm and evil weather.

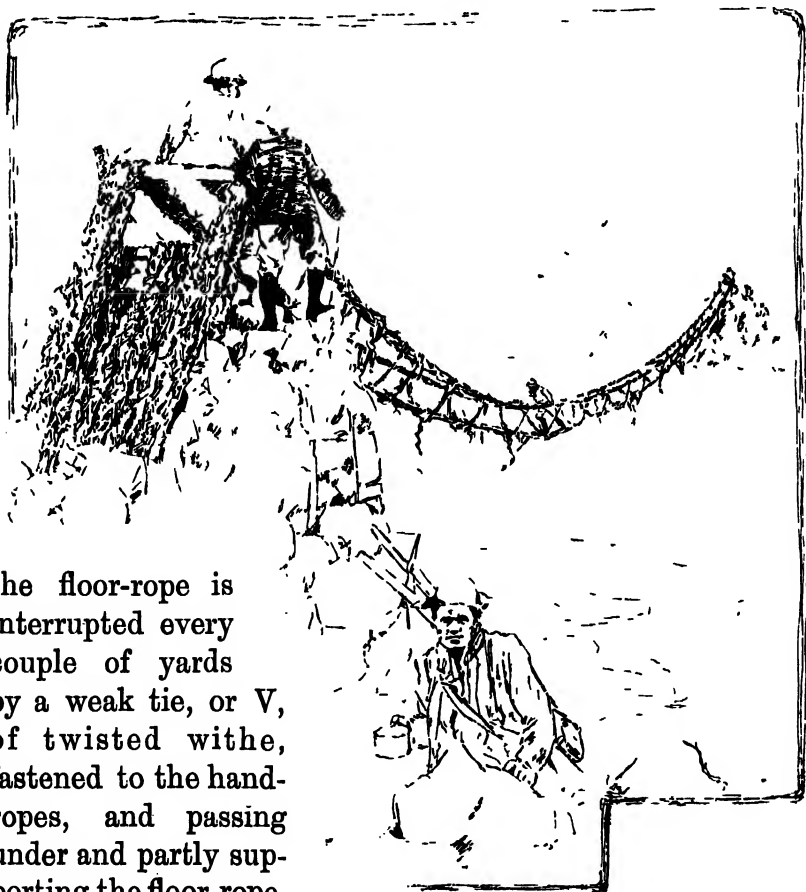
We reached the bank of the Gilgit river in a few

minutes. The only way of crossing it was by a long rope-bridge, till Captain Aylmer spanned it with a suspension bridge, cleverly contrived of wire and wood. It was unfortunately destroyed by the summer floods, but has doubtless since been renewed. Once over on the far side, we turned down the left bank. The sure-footed ponies, bred in all manner of places from Yarkand to Peshawar, cantered briskly over the stony and sandy track, and soon caught up the rear of a column of some 150 laden mules belonging to the mountain battery. They were on the way to the Niltar pastures, forage being scarce at Gilgit. We ultimately got by them, not without danger of being kicked, and came up with Gorton, who was riding at their head; but we could not accompany him far, for our ways soon parted. We watched the gunners wind off up the Hunza valley, and then, bending away to the right, we descended a steep and narrow path, down the face of the Gilgit river's alluvial cliff, to the beach of the stream. A few minutes later we traversed the sands to the right bank of the Hunza river, whence the long rope-bridge, or *jhula*, which had to be crossed, stretched away before us. We regretfully quitted the ponies, for a laborious march was beginning, and we were all out of condition, pulled down by the heats and malarious vapours of hospitable Bunji and Gilgit.

The rope-bridge, though rather long (some 75 yards, perhaps), was a very good specimen of its class, which may be described as the usual type of bridge in this region of the world. *Jhulas* are formed of cables of twisted birch or other suitable twigs, each cable having a diameter* of from two to three inches. Three of these cables, hanging in close contact side by side, and here and there tied together, formed the floor of the bridge. There is a hand-rope at a suitable level on each side, hanging in a similar curve to that of the floor cable. Each of the hand-ropes is formed

* In the best *jhulas* the cables are thinner, and there are more of them. The floor of the best one we saw, the Askole bridge, consisted of nine small cables.

of a couple of cables twisted round one another. They are uncomfortable things to hold, being too thick to grasp, and spiked all along with the sharp projecting ends of the birch-twigs, whose points keep catching the sleeve at awkward moments. The gaping void between the hand-ropes and



DAINYOR ROPE-BRIDGE.

the floor-rope is interrupted every couple of yards by a weak tie, or V, of twisted withe, fastened to the hand-ropes, and passing under and partly supporting the floor-rope.

At intervals of twelve

yards or so there is, or should be, a horizontal cross-piece of wood, firmly tied to the two hand-ropes, to keep them apart and to prevent them from spreading too wide. The cross-pieces are about at the level of the waist of a man standing on the bridge. These have to be climbed over as they occur.

A jhula is thus a cleverly constructed suspension bridge. It follows that it must hang over a gorge or from artificially constructed piers. The flatter it is, the greater will be the strain upon it, but the pleasanter it will be to cross. This bridge was carried over piers, rudely, though strongly, built of piled stones, plenty of which were lying about. It was pulled very flat, yet its lowest point came close to the raging torrent, and, when we crossed it again about a month later, it was actually in the water. The bridges that hang, more loosely than this one, over a gorge swing about greatly in a wind. The natives let them get into a rotten condition before they mend them, and the reader will readily perceive that a rotten, swaying, giddy jhula, with one or two of its cables broken, no cross-ties, and very few V's, is about as nasty a thing for a landsman to cross as may well be imagined. I have no hesitation in confessing that I hate all forms of moving water. At the best they remind me of the loathsome sea, and they always make me giddy. Our bridge, however, was new and strong, and the novelty of the situation was exciting; so that I crossed the thing without discomfort, and in a merely inquisitive frame of mind, such as one might have on a first occasion of dying. To be quite truthful, it should be added that, when I reached the swiftest part of the current, the situation was none of the pleasantest; for the deceived eye deluded the imagination, and made believe that the water was standing still, and the bridge itself swinging furiously up-stream.

When all were comfortably over, and Pristi had been carried across, we mounted to the green fields of Dainyor, where our servants and the coolies had spent the night, and we hoped to find breakfast awaiting us. Our hopes were disappointed; but we bought some tiny chickens, and spitted their limbs over a wood-fire. Goats' milk and raw eggs completed the banquet, which was spread in the shade of mulberry trees grasped by thick-armed vines. An attentive crowd of squatting villagers, with amiable and not unintelligent countenances, watched our proceedings,

and, when we had finished, the lambadhar came forward and demanded a *chit*. We left the pleasant place reluctantly, and the work of the day began.

Slowly, silently, persistently, we plodded along the heavy path, sometimes sinking into sand, sometimes stubbing our toes against unnoticed stones, but always thankful that the day was cool and the sun veiled. Now and again we glanced across the Gilgit river at the fans traversed so painfully in our upward march. We measured our rate of progress by the position of Minawar, which had to be left behind before the mouth of the Bagrot valley would be reached. The way led sometimes over sand-flats, sometimes amongst great fallen rocks, near one of which we discovered an echo that gave us an excuse to halt. Above us on the left was, for a couple of miles, the edge of a high-planted mud-avalanche fan, cut into earth-pyramids at its edge—a remarkable object to behold. It looked like a hanging mud-glacier. When this was passed we came to the end of an ancient moraine, forming the continuation of the west wall of the Bagrot valley. Only the crest of this moraine emerges above the deep alluvium, wherewith the Gilgit valley has been filled since the time of the glacier maximum. Many other moraines and traces of glacier action are doubtless wholly buried beneath *débris* accumulations.

After rounding the moraine we turned northward up the right bank of the nala, cut deep into the alluvium, at the bottom of which flows the Bagrot stream. As we approached the gates of the valley the naked mountain, high on our left, displayed its steep-tilted lines of stratification in slate-like parallelism, far as the eye could see. This formation lasted on either hand of us during the remainder of the uneventful march. In other respects the scenery we were entering resembled that of the valley we were leaving. The Bagrot valley is, of course, narrower, but in its lower part it is no less barren than the Gilgit valley. There are the same accumulations of mud-avalanche *débris* below and of mud-avalanche fans planted high aloft on the

edge of cliffs. Formerly, indeed, there used to be more irrigated fields towards the valley's mouth; but these, and others higher up, are deprived of their life-giving waters by reason of the streams having deepened their beds and left the old water-channels high and dry.

The path mounted gradually for some time, then entered a region of great fallen rocks, and sloped upwards more boldly. Turning a sharp corner, it revealed a view of green places ahead, which we were glad to hear belonged to Sinakar (6,920

feet), and were in the neighbourhood of our camp. We presently overtook the last of our slow coolies; we plunged into the bowels of a deep lateral nala, quitted it by clambering up a stepped water-gully, and so came abreast of the fields and ruinous fort.



SINAKAR.

We observed with surprise how admirably the land was cultivated, and how thick and healthy were the growing crops—the best we had seen. The villagers were bright and cheerful. One of them hurried forward to guide us to the camping-ground. A noble group of chinars, rising above mulberries and walnuts, attracted our attention. Pleasant it was to find our tents ready pitched in a well-swept area close to them. An admirable lunch, smoking hot, awaited our eager appetites. When the physical labours of the day were ended it

was 3.15 p.m. There was plenty to occupy me during the rest of the daylight. When I went to sleep the rain was again pattering on the roofs of the tents.

May 12th.—It was still rainy and disagreeable when morning dawned, so that our unwilling start did not take place till 6.30 a.m., and even then the coolies, availing themselves of local knowledge, hid behind some bushes and there remained half an hour longer, whilst we believed that they were on ahead of us. I fortunately discovered the fraud in time, and caused the loiterers to be hurried up. The path led uphill for some distance to surmount an obstacle, and then descended the picturesque windings of a lateral nala. At its highest point we ought to have enjoyed a view of the Dirran peaks, but rain-clouds obliterated all the upper regions. Still the view over successive cultivated fans, with a stony tract beyond, leading to the dark end of the crag-bound Bagrot glacier, called up reminiscences of many a Swiss scene.

I did not scan my watch too closely when, on reaching a shaded meadow with water rippling by and the sun shining after the showers, some one suggested that there were sardines and biscuits in a kilta just being carried past us. Nor do I know how long we may have lain upon the grass refreshing ourselves, and occasionally glancing up a narrow valley to the north-west, which, when clouds permitted, gave a pretty glimpse of a peak named, I believe, Uchubagan. At all events at ten o'clock we went forward again, and almost immediately entered the thriving village of Datuchi. A wall of rough stones, crested with dried branches of a thorny shrub, surrounds the oasis.

The whole of the Bagrot valley bed must at one time have been filled with glaciers, as the moraines at its mouth prove. It was surprising, therefore, to find no traces of glacier action visible from the path. The slopes which should show such traces are formed either of rocks, from which stones constantly fall, or of the accumulations of such fallen stones. Apparently there is no surface left that is as old as the time of glacier expansion.



THE BULCHI BAND.

—
G. S. —
—

I made these observations on the road between Datuchi and the next cultivated fan, Bulchi by name. They were suddenly put a stop to when we rounded a corner and came within the range of vision of the expectant villagers, whose pipe and drum band* of five performers set the echoes ringing with the most hideous noise, intended in our honour. The chief peasants came to greet us, and led us, with the band in front, to the village forum, a tiny green, roofed by the arms of walnut trees. A *charpoi* (bedstead) had been prepared for us to sit upon, and we were expected to pause and enjoy the concert. Pipers and drummers, squatting on the ground, blew and beat with praiseworthy vigour, and a dancer stepped into the ring and performed. One of Roudebush's Kashmiri coolies became infected with the local enthusiasm, and displayed his agility by prancing around with a kind of polka step, and brandishing a quarter-staff. He was one of the most vigorous men we had, but cholera destroyed him about three months later.

We quitted our hosts as soon as possible, and pushed on towards camp. On leaving Bulchi we passed a tree with a built-up prayer platform at its foot—a common arrangement in this Moslem country, doubtless a relic from pagan days. Instead of crossing the bridge to Chira, below the village, and so going round by Sat (which would have been a good way), we kept on up the right bank of the Bagrot stream. The path soon failed us, but we continued to advance easily over a flat region of rounded *débris*, and, in about half an hour, at one o'clock, we found a sufficiently good camping-ground (8,110 feet) on an old moraine, close to a big boulder, and not far from the foot of the glacier. After lunch, Bruce, Zurbriggen, and the Gurkhas went off for an excursion on the ice, whilst I remained in camp hard at

* The reed-pipe, or *suranai*, is almost exactly like the Scotch bag-pipe chanter. So Roberts told me at Gilgit. It has a scale of nine notes of the same intervals as the bag-pipe, except that the three upper notes are flat. These remarks apply to all the reed-pipes of the country.

work. A heavy storm in the afternoon tested the tents to our satisfaction.

May 13th.—When we started at seven o'clock it was admittedly late, but we had only a short distance to go, and the weather was moist and unpleasant. We picked



LOOKING DOWN THE BAGROT VALLEY FROM BULCHI.

up a fragment of old path which once led between the right margin of the glacier and a rock-wall to Kamar. Now the ice is against the wall, and the path is blocked. A few days later we found other indications that the Bagrot glacier is advancing. In half an hour we reached the margin of the ice, at a point about half a mile above the snout. Some hundred steps had to be cut up a steep ice-wall to take us

on to the glacier. Our object was to cross over to the left bank and there camp. The coolies were sent round by the bridges at Bulchi and Sat, and were to join us without touching the ice. We had to find a devious way among crevasses and seracs large and small. It was a

little disappointing to observe that, far as the eye could reach, the whole glacier was thus broken up, and did not appear to be at all an easy highway to the upper regions. Bruce took the Gurkhas off for a longer ramble, to let them cut steps and feel their feet on the ice. Shahbana followed me, and we presently came to a fairly broken passage in the seracs.

"Here," said Shahbana, "the coolies could not be brought. Are you," he asked, "going up there into the snow?"

"Yes."

"And the tents?"

"No; only the little tents."

"Well, you go; Gurkhas go; I not go."

As a matter of fact he did afterwards come with us to a considerable height, and climbed fairly well, but, like all Shikaris, he went much better on ground at the same level than higher up on ice. McCormick and Roudebush followed Zurbriggen on the rope. It was their first experience of glacier-walking. They amused me by pulling one another, unintentionally, out of the steps, and exchanging mutual recriminations with utmost volubility. "So ist es immer mit Anfänger," commented Zurbriggen, "zuerst ist Alles Scandal; nachher sind Sie eins."

We found some difficulty in getting off on to the left bank of the glacier, for the ice had shrunk away from the moraine and left a cliff not easily negotiated. On the other side of the moraine are fir-woods and a shady valley. We mounted along the moraine till we came opposite the hamlet and fields of Dirran. We searched for the coolies in vain. At length one of them appeared without his load. He had been sent on by the others to see if we really did cross the glacier, whilst they stayed below and awaited definite intelligence.

Our position being fairly elevated, we were able to scan the opposite side of the valley, and to see how much better it would have been if we had taken a high path from Bulchi

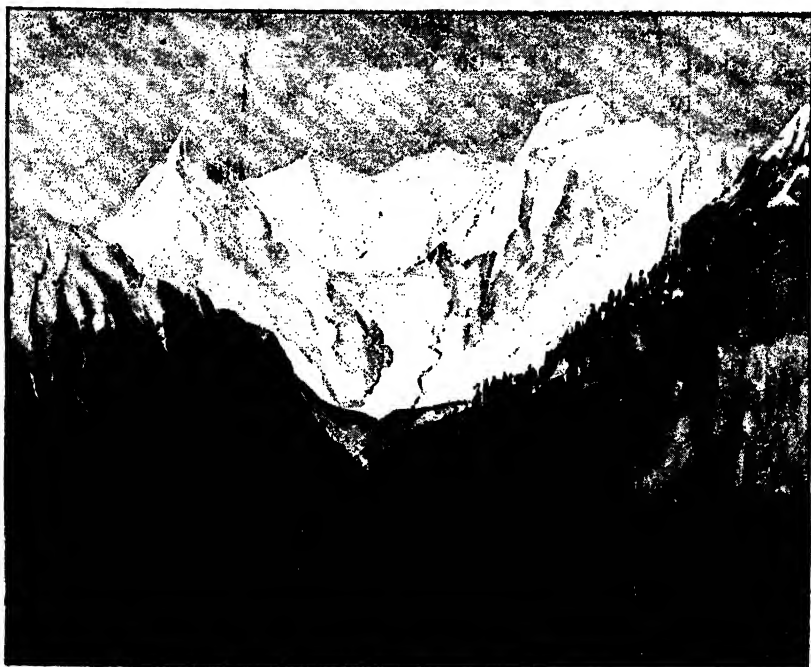
and gone round the shoulder of the hill to Kamar (where we afterwards camped). We should have reached it on the previous evening, and been a day to the good. Moreover from Kamar a sheep track leads up alongside the glacier to a high summer alp—an excellent point to start from for our proposed col. Such improvements in a route always suggest themselves when one has adopted another way. One learns by degrees to perceive them without regret, content on every occasion to do the best suggested by such knowledge as is at the moment available.

When the coolies arrived we pitched camp in a delightful position (9,500 feet), on an ancient fan, abutting against the moraine, and not far below a waterfall. Firs and junipers shaded us, and the ground was carpeted red with the dried spines of last year's foliage. A stream ran between the tents, and the ground drooped away westwards to the valley. There were at the time mere suggestions of mighty peaks in various directions, but that was all the clouds permitted. Between us and the glacier, in a breach of the old moraine, was a lake with icebergs floating on it; a dab-chick was swimming about amongst them when we arrived. A staircase had been hacked out down the steep mud-slope leading to it, and a little stone man at the top of the slope showed where the staircase was to be found—a thoroughly Alpine arrangement.

Later in the afternoon there was a little breaking in the clouds, and we caught glimpses of a tremendous peak right opposite to us, whilst, looking down the valley over the foot of the glacier, we were startled to behold the white curtain rolled aside from Dubanni, revealing a series of beautiful but hardly climbable peaks. The white slopes of the mountain are swept by avalanches on all sides. They surround two glacial amphitheatres, the snowy contents of the upper of which are tumbled by an icefall into the lower; and from that by another icefall into the Gosona glacier beneath. Later in the season the avalanche-slopes may change their character and become accessible, but I hardly

think so. The peak must be attacked from some other side.

May 14th.—If we had come into the Bagrot valley at the close, instead of the commencement, of our mountaineering season, we should have been more impressed by it than we were. The effect of scenery upon a man largely depends upon what he has seen before and lately come from. It is for this reason that I have written the story of



DUBANNI (20,168 FEET) FROM DIRRAN.

our whole journey, from London out, so that the reader may learn how the contrasts struck us and how we came to see things as we did see them. Between the desert valleys of Bunji and Gilgit and wooded grassy Dirran the contrast was of course great; we expected that it would be so, and the fact did not surprise us. If from Gilgit we had passed round to Hunza, we should have seen no woods and, save where there was irrigation, no grass—only glacier and rocks, with vegetation so scanty near their meeting as not even to

colour the view. But around the glaciers of Bagrot there are flowery swards and pretty woods, and higher up grassy alps that kine might graze. We nowhere else saw anything like it. Dirran and Gargo might perfectly well be in Switzerland, only that the peaks are larger than the Alps. There is nothing Swiss in the appearance of the great glaciers and strange regions visited by us in the months of July and August.

The rain, that so persistently followed us, continued falling all night, and, when we awoke, the high peaks were draped in a still deeper covering of fresh snow than before. It would evidently be impossible to climb any of them for days.

After breakfast Bruce and I took the Gurkhas to practise step-cutting on the glacier, and to learn the use of the rope and of their climbing-irons. The glacier opposite camp was broken into a chaos of pinnacles and crests, which stood out beautifully, when the sun shone on them, against the green hill. We cut our way into the midst of the labyrinth, and I was delighted with the men, they went so freely along edges of ice and across steep slopes beside deep crevasses. Their habits of discipline made them easy to teach. They at once picked up the idea of how to use the rope, and thereafter always handled it with right intention, swiftly developing into skill. Presently we put the four men on one rope and set Parbir to lead and cut the steps which it was the business of the others to enlarge. Now and again I observed that a step was cut in an already flat place, after the manner of beginners, but few novices that I ever saw stood with such ease in the steps or cut with so free a swing. Amar Sing clambered up and down seracs as though to the manner born. When Lila Ram approached a difficulty his face became a maze of wrinkles, which gradually flattened out into a smooth triumphant moon as the obstacle was overcome. All four worked with so much vigour that they smashed two of the axes, but fortunately there were a dozen to fall back on.

Zurbriggen returned at lunch-time with a story about

three giant ibex he had seen, but was unable to approach. He was busy all the afternoon mending things, and more especially nailing and mending boots. His skill with tools was invaluable to us throughout the journey, and I shall have occasion to refer to it hereafter more than once. The ideal mountain-traveller's guide should be a clever workman. Zurbriggen is the only man of the kind I have yet discovered.

Towards evening there was again a breaking in the clouds. Dubanni reappeared in fascinating splendour; but our eyes were attracted in the other direction, where, across the glacier, the veil was being partially withdrawn from Rakipushi's great rock buttress, Chiring Chish. Not till the sun had quite set did the head of the peak become bare, cleaving the sky to a wondrous height, so that we mistook it for Rakipushi himself. Details were lost in the gathering gloom, but the imposing mass of the thing impressed us all with a new sense of power and grandeur.

May 15th.—At last a fine day came bringing hope. The sky and all the peaks were clear, and the nobility of our surroundings became apparent. I began my survey of the district, and worked at it all day, whilst Bruce, Zurbriggen, and the Gurkhas ascended a rocky peak, about 16,000 feet high, immediately behind our camp. It was a south-westerly outlier of the Spear of Dirran, and we named it the Ibex peak. It afforded, so Zurbriggen said, some very difficult rock-climbing, and the Gurkhas again did excellently.

As the day advanced "drying" clouds hung about the flanks of the mountains, and often hid their summits, but the silver brilliancy of the snow was not dimmed, the cloud shadows only serving to manifest it by helpful contrast. The ceaseless hum of distant avalanches mingled a solemn note with the rippling of the glacier streams, the rattle of falling stones, and the sighing of wind in the trees.

I returned to camp by a track that kept beside a little *Wasserleitung* (in *Shina* called *Il*). At one place a baby landslip had fallen into it and blocked it up, forming a lake-basin—a tiny repetition of the Hatu Pir fall into the

Indus. The rivulet was busy cutting a channel through, or rather round, the outer edge of the fallen fan, and I amused myself for an hour watching its toil and sometimes lending



FROM HINARCHI MORaine.

a helping hand. The chief trouble the stream had was, not so much to cut down its gully as to deepen its channel just within the lake at the entrance to the gully. If one removed some soil at that point the banks of the fan were quickly

cut away, the gully was widened, and the *débris* carried off by the water.

Whilst we sat over dinner, discussing the events of the day with our returned mountaineers, light from the setting sun struck through a level gap between a belt of clouds and a ridge, and cast a red band across Dubanni's silver shield. It was the first Alpine glow that we had seen, and we heralded it as an omen of good luck. The light presently faded from all the hills; our camp-fire blazed beneath the trees; its glare smote upon bronzed faces and reddened the trees, dark against the yet blue sky.

May 16th.—The morning being again fine I started off for a day's surveying with Bruce, McCormick, and Zurbruggen. We kept up the left bank of the glacier, along the crest of the great moraine, and enjoyed every step of the way. Later in the season this glacier edge must be a perfect flower and fruit garden. It is shaded by many firs and plentifully adorned with wild roses. Currant bushes are common, and there are numerous beds of strawberries, of which here and there one timidly displayed an early flower. The views were of course superb—the vertically stratified precipices of the Ibex peak on our right, the mounded glacier on our left, and beyond the astonishing crags and precipices of Chiring Chish that hid Rakipushi's peak from view. In front, closing in the head of the valley, was the watershed ridge which descends eastwards from Rakipushi, and over which our pass should lie. Behind, the glacier drooped away and opened a beauteous view of the snow-peaks of Chilas with soft clouds floating above them.

All day Chiring shook the new snow off his flanks, and some of the avalanches were enormous. They filled the air with snow-dust, that hung about like the smoke of big guns, and, rising high aloft, mingled with the circle of clouds girdling the peak about and smothering his crest. I hoped to reach the angle, where the névé basin sweeps back to Rakipushi's final cliff, but the survey work that had to be done took too long. We gained a good view of the saddle

we desired to cross, and made a careful study of its approaches. There is nothing impracticable about the moderately steep wall of rocks and snow-slopes leading up to it, but at present they were overburdened with new snow and continually swept by avalanches. The furthest point reached—and we never again were so far in this direction—was an angle of the moraine, covered with birches. To arrive at it a mighty avalanche, recently fallen from the Ibex peak, had to be crossed. Here I worked for about an hour, almost distracted by flies, which seemed to exist in millions at this spot. A cloud of them followed us back to camp and made our lives wearisome for the rest of the day.*

* The following plants were found near Dirran Camp :—*Gagea lutea*, a *Salix*, *Scrophularia variegata*, *Bothriospermum*, *Androsace septentrionalis*, *Androsace rotundifolia*, var. *Thomsoni*, *Sedum fastigiatum*, *Chesneya cuneata*, *Ruta Gilesii*, *Chorispora sibirica*.



KARBIR THAPA.



UCHUBAGAN CAMP.

CHAPTER VIII.

DIRRAN TO GARGO.

May 17th.—At 5.30 a.m. Zurbriggen and I, with McCormick and Roudebush, left Dirran Camp and trudged for about half an hour up the valley path beside the moraine. We were going to camp for a night or two at Kamar, and Bruce was to see about moving the baggage during the day. An hour and a half was spent in zigzagging about on the glacier; ultimately we came to land on the far side, at the foot of a long stone-shoot, descending from a saddle on the south-east rock-ridge of Chiring Chish. The remainder of the ridge, from the col down to Kamar, is grassy and wooded, and is called the Bari Rung.*

Zurbriggen and I now parted company with the others, and deposited our heavy packs, which the coolies were to

* *Rung* = alp, or high pasture; desert, rocky, or snowy high places are called *Chish*.

fetch. We started up the stone-shoot, with a rock-wall on our left hand and the craggy chaos of the great peak on our right. The sun began to attain power, and the distance up to the saddle seemed to lengthen before us the higher we climbed. Zurbriggen carried a rifle, and was on the alert for ibex; my burden was a camera and a water-bottle; the liquid did not last a thousand feet. We saw plenty of ibex; but on stalking them they always turned out to be the shadows of stones! Still, we nourished a hope that, if the saddle were ever reached, there would be an astonishing flock browsing just over the edge on the other side. After three hours and a quarter the expected moment came, and we peeped over with every precaution: there was not a head in sight. Zurbriggen, with the hopefulness of an old chamois-hunter, went off to continue the search, whilst I set up the plane-table and prepared for work.

The morning was glorious, and the view superb—far finer, said Zurbriggen, than that from the Ibex peak. We were not, as we expected to find ourselves, on a narrow ridge, but at the edge of a broad plateau (13,980 feet), traversed by a path, and evidently in former years grazed by sheep and even cattle, though of late abandoned. Behind us were the buttresses of Chiring Chish, rising with a sudden spring into the clouds. Never have I seen a grander mountain mass than this, and we were standing at the very point whence it makes its splendid upward strike. The Kamar glacier was at our feet on the one hand and the Bagrot glacier on the other, both enclosed by dazzling, snow-draped walls. Before us was many-plateaued Dubanni, father of icefalls, cleaving the distant view into two parts. In the midst of one reigned Nanga Parbat, above the bewildering intricacy of many ranges, and looking abroad over the snows of Chilas. To the left of Dubanni stretched a ridge, joining the main range at the Emerald peak, and dividing the basins of Gargo and Khaltar. But what were the two giants that lifted their heads so imposingly beyond? Could one of them be Haramosh? and, if so, what was the other? The plane-

table set these doubts at rest. We mounted and duly oriented the map on it, found our own position accurately, and then laid the sight upon the right-hand peak; the edge of the ruler passed over the point of Haramosh. The other peak was in its turn identified as the high mountain that guards the head of Nagyr and looks down all the length of the Chogo glacier. A long ridge joined these mountains, and over it we caught glimpses of the white wall that divides the Chogo basin from the Indus. Haramosh appeared to be accessible by its northern ridge. The Chogo giant can be climbed by its long south arête.

We lunched and filled our minds with the delight of the panorama. I took photographs of every interesting point, then set the camera on the ground and went to work at the plane-table—a more fascinating occupation than most climbers suspect. Alas! this time it was fatally fascinating. The nature of the ground cramped my movements, and I inadvertently touched the camera with my foot. Away it slid in its leather box, then bounded like a wild thing, and crashed madly down the slope. I saw it well on its way, and, turning, continued my work, unwilling to see the thing smashed up before my eyes. Zurbriggen went after it, and found it caught by its strap in the stump of a tree about a thousand feet below. Its sides were cracked, and its brass angles wrenched awry. The glory went from the view, and we turned to descend.

It may be imagined that I pondered not a little on the greatness of my misfortune. I had brought three cameras with me from England: first, a small "Luzo" hand-camera, with which I had done good work in the Alps; secondly, a larger hand-camera, specially made for me on the "Luzo" lines, with a Dallmeyer wide-angle rectilinear lens; thirdly, a still larger camera of a common type. The small "Luzo" was in good condition; but all the films I brought to fit it were bad—wholly lacking in sensitiveness to light. My second and, as I intended, principal mountaineering and surveying camera, was now ruined. The third did not

resist the great variations of climate through which it had been carried, and let in some light by the flange of the lens, so that good photographs could not be taken with it ; moreover, it was cumbrous and unsuited for high mountain expeditions. When I found that the small "Luzo" had failed me, owing to the badness of the spools of film, and that the large camera had not stood the voyage—discoveries made at Srinagar—I telegraphed to England for a "Key" camera and one thousand quarter-plates, to be sent to meet me at Askole. What was to be done in the meantime? That was the problem I inwardly discussed throughout the descent.

As we advanced down the ridge of the Bari Rung, keeping to the traces of a good old path, action quickly restored our tone ; and when, after half an hour's brisk walk, we came to a point of admirable vantage, and the plane-table was again set up, we recovered our faculties of observation, and even delight. The remainder of the descent brought us in contact with no less of beauty than what had gone before. The great mountains, one by one, sank out of sight ; but there was ample compensation in the firs, the cedars, the junipers, and the wild roses decking both slopes, and even the crest down which the good path led.

At length we reached the foot of the slope, close to Kamar, where the two glacier valleys join. A short walk through a tangled wood, which fills the dip between the Bagrot glacier's moraine and the hillside, led to the open fields of Kamar, now uncultivated and waste. Sheep were grazing the wild grass on the abandoned threshing-floors, and the shy shepherd boys directed us to our friends. We found them encamped beside the Kamar glacier's torrent (9,400 feet). They had built themselves a shelter out of pine branches, and were luxuriously reposing on a bed of leaves. Near at hand was a bright fire, and the scent of cooking was in the air. Shortly afterwards, Bruce came in from piloting the coolies over the glacier—no easy task—and we settled down for the night.

When darkness prevailed, a great bonfire was lit; the flames leapt aloft, and licked the branches of the trees. One began to catch fire; but a man rushed forward with a pole, and levered the blazing mass into a freer space, himself cut out in vigorous silhouette against the flaming background. Some half-dozen coolies, labouring together, broke down an old dry tree over the fire; and so bright a burning arose, that it seemed as though the very mountains must redden in light, which made day for us in the tents, and smouldered till the morrow.

May 18th.—The morning destroyed our hopes for any such continued spell of fine weather as might clear the mountains of their burden of fresh snow and open a way to our pass. To make matters worse, Bruce was overtaken by one of his recurrent attacks of Burmese fever, and could not leave the tent. When we had passed half the day in idleness, time began to hang heavy on our hands, so McCormick, Zurbriggen, and I loaded up a couple of coolies, shouldered burdens ourselves, and started off for a high bivouac, as near as we could come to the head of the southern branch of the Kamar valley.

We experienced considerable difficulty in crossing the glacier torrent to its right bank, which we followed up to the junction of the streams. The main Kamar valley leads to a glacier basin at the foot of Chiring's cliffs; the southern branch, called Uchubagan, is narrower and steeper, a gently sloping couloir, in fact, filled at this time of the year, from the col at its head (Uchubagan pass) to its very foot, with one continuous body of avalanche snow. We reached the snout of the sinuous couloir in half an hour from camp, and at once began to mount the snow. The barefooted coolies followed us without hesitation, but, wherever possible, they took to the rocky sides of the couloir. We advanced straight ahead for about two hours, over snow that was pounded and frozen into an icy mass. It was in many places necessary to keep a sharp look-out for the stones, which frequently fell, with the speed of cannon balls, from

the ridge high on our left, and crashed against the opposite wall, starring it all over by their impact, and covering the snow with their *débris*.

We found a good place for our bivouac (12,700 feet) close to a point where the main couloir was joined by a smaller one. A rock jutted out from the mountain-side and formed a shelter. Shepherds had used it before us, and fashioned a platform beneath it. There was a convenient spring of water close

at hand, and plenty of brush-wood to burn. We did not then know how rare are such luxuries in the Karakoram. The snow that cluttered up the place had to be dug out, a fire lit, and the Mummery tent pitched. When all was done we sat down to admire the play of clouds on the cirque of mountains from Dubanni to Dirran,



UCHUBAGAN PASS AND SERPENT'S TOOTH FROM GARGO.

and the sweep of the snow-besoms over the purple Gargo valley and its stone-covered glacier. Our foreground was a bleak slope, half covered with winter snow, through which the birches stood out naked. The sounds we could hear were the sougling of wind, the crash of falling stones, and the weird cry of chukor amongst the neighbouring rocks. We soon crept into our little tent, turned over once or twice, and went to sleep.

May 19th.—The night was warm, and we were comfortable in our sleeping-bags, but Zurbriggen, always attentive to business, began striking matches and consulting his watch at two o'clock. We persuaded him to give us an extra half-hour's rest, but that was the limit of his indulgence. As we were cooling our thin soup in the open air, the morning star rose behind the faintly moonlit mountains. We packed the baggage for the coolies to take down, and at a quarter to four started upwards. The warm night rendered the snow soft, and we now had to pay for our past comfort. It took us four hours to pound up to the pass (16,280 feet), the slopes becoming continuously steeper and the snow softer as we advanced. The last hundred feet must have occupied almost a quarter of the whole time, for we had to push ourselves waist deep through the snow. An interesting though not specially beautiful view rewarded us.

The glacier at the head of the Dainyor valley was at our feet, and we might have glissaded down to it. On its far side was a range of snowy peaks and walls, leading from the mass of hills over Gilgit on our left, up to the highest point of Rakipushi on our right. We noticed that the great, though, from here, strangely insignificant-looking, peak, could be ascended by this arête, which is a long and gentle snow crest, apparently not corniced. The only difficulty is to get on to it. The wall leading to it, when we were there, was entirely avalanche-swept from end to end. Later in the season this might not be the case. Of course, for all I know, it may be easily accessible from the Jaglot nala on the west. A corniced snow arête led from our col to the Uchubagan peak on the one hand, and a rock arête led on the other to the higher peak, whence descends the ridge that divides the Kamar basin into two parts.

After an hour's halt we turned to ascend the rock arête. It was encumbered with rotten snow, which curled over into heavy cornices wherever opportunity offered. The climb, under ordinary circumstances, would be an easy and pleasant one, for, though the rocks are steep, they are firm

and rough. As we found them they presented considerable difficulties. We made but slow progress, and after three hours of hard work had only ascended 1,300 feet to the summit of a prominent tooth (17,580 feet). The top of the mountain was still at least two hours higher. Clouds now covered the summits of the opposite ridge, so that no survey work could be accomplished from the peak if we reached it. Zurbriggen stated that, in his opinion, unless we turned back, we should have to spend the night among the highest rocks. As we were considering the question, the weather went from bad to worse, so we named the place in disgust the Serpent's Tooth, and turned down to try and regain the col before the gathering storm should break.

During the quarter of an hour we spent on the point, our attention was for the most part concentrated on the one clear patch in the view, the mountains of Darel behind Gilgit. Beyond them, in the exceeding far distance, bearing approximately 25° south of west, was one much loftier mass. It may have been in the neighbourhood of the Dodargali pass, but I imagine it to have been further off in Kohistan, and not impossibly a part of the snowy range we saw from the Brigade Circular at Abbottabad. Eastwards there were no mountains clear, but we caught an unexpected glimpse of the hot Indus valley near Bunji sweltering in sunshine.

Our descent to the col had to be made with great circumspection, for it must be remembered that the rocks were very steep, successive slabs set up on end and divided from one another by narrow ledges. Moreover, as the day advanced the snow became more rotten than ever, and avalanches kept falling, not only down the face of Uchubagan, but from our immediate neighbourhood. Two hours of careful scrambling brought us again to Uchubagan pass. We emptied the last atom of food out of the sack we had left there, and started away. Floundering and glissading brought us down to the place of our bivouac, and, in half an hour more of standing glissades, we reached the foot of

the long couloir, and crossed to the left bank of the stream. A few minutes later we were in Kamar camp.

We were pleased to find that Roberts had arrived from Gilgit to pay us a visit. He could not have come at a more opportune moment. Bruce was still down with fever at Kamar; Eckenstein was ill at Dirran. The returned climbers devoured two or three nondescript meals in rapid succession, ending up with a brew of soup, and we all retired to sleep in a variety of shelters.

May 20th.—For commissariat reasons we could not remain at Kamar. Bruce was getting over his fever all right, so, leaving with him Roberts' hospital orderly, two servants, two Gurkhas, and all the food and spare wraps, we started at nine o'clock for Dirran. The morning was fine, and we had an agreeable passage across the broken glacier. I was interested to observe how well the Gurkhas had learnt their way through the maze of crevasses, and with how ready a certainty they retraced the steps of previous journeys. There were long arrears of work to be written up in camp, and I was busy during the remainder of the day.

In course of the morning Roberts' coolies arrived from Gilgit with his baggage. When his tent was pitched, and we had lunched, I gathered the natives together, and,



THE DESCENT FROM SERPENT'S TOOTH.

with Roberts' help, held a conversation with them. They stood at first shyly with hands joined in humble attitude, but as their confidence increased they seated themselves in a circle on the ground, all except one brawny fellow with half-naked chest and open countenance, who led the talk and took much interest in all that went forward.

"I want you to tell me," I began, "the names of mountains and places hereabouts. Have you names for these snowy hills?"

"This place here is Dirran; all this hill is Dirran."

"Yes, I know that; but have you a name for that high white mountain there?"

"Where the goats go in summer there are names."

"You have no names, then, for places to which no one ever goes?"

"No, no names."

"Do goats go further up this nala than where we now are?"

"Yes, they go far up. They go to Hinarchi. Those are the goats of Bulchi that go to Hinarchi. All the inside of this nala is Hinarchi."

"Look up there," pointing to the Bari Rung at the foot of the Chiring* buttress of Rakipushi; "do not the goats go up there? and has not that place got a name?"

"Oh! that is Pushi."

"No, I don't mean that high mountain in the clouds, but that green place below it. Don't the goats go there?"

"Yes. That is Bari Rung."

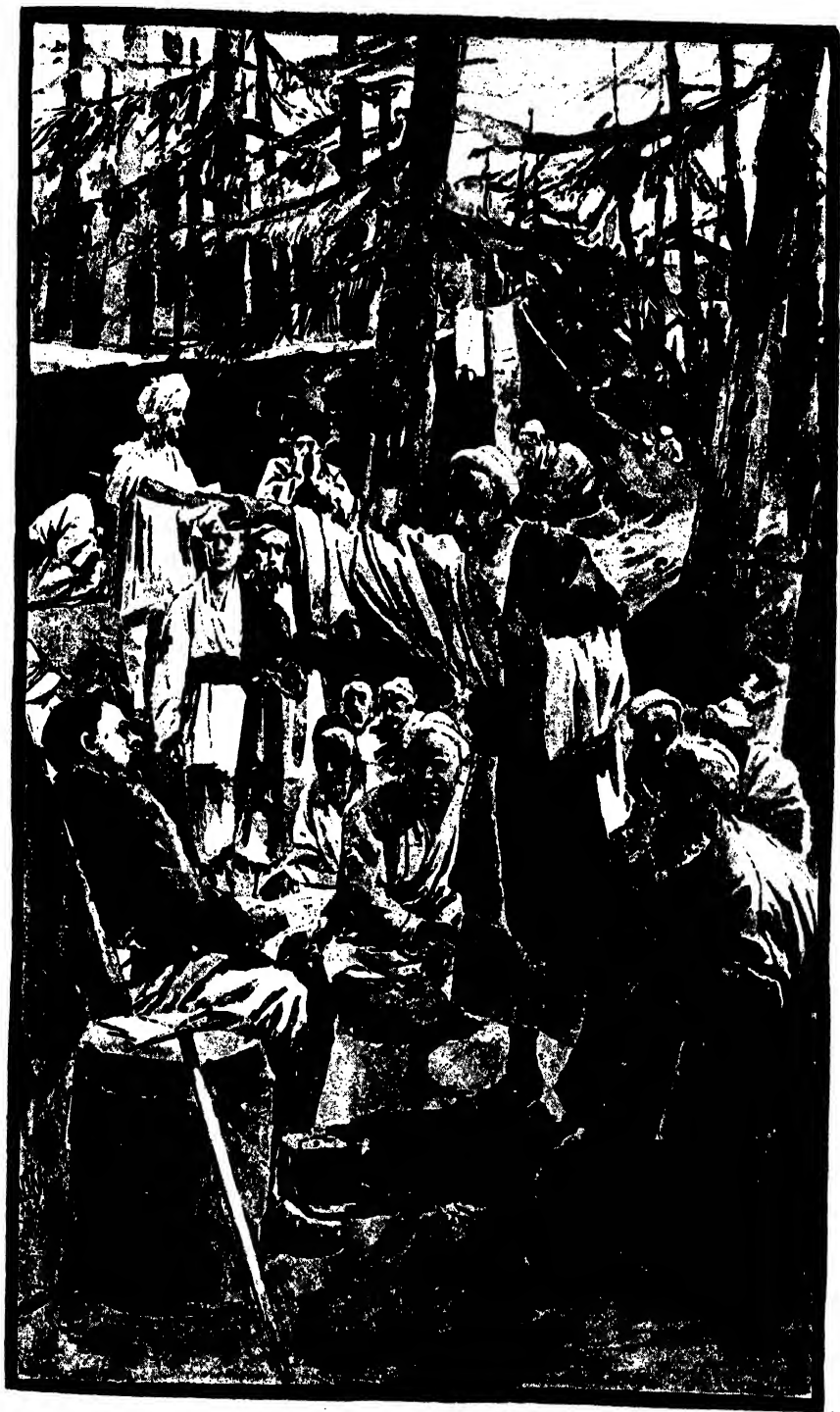
"And what does Bari Rung mean?"

"There is a white maidan (flat place) there, and that is why it is called Bari Rung."

"Does *bari* in your tongue mean 'white'?"

"No. Bari Rung is the name of the place. It means nothing. It is just the name."

* The name Chiring Chish comes from the people of the Chiring village in Dainyor. They see Chiring Chish and Rakipushi like two different mountains.



PALAUER AT DIRRAN.

"Now what is that nala over there?"

"That nala is Sat."

"Tell me, can you not go over those hills behind Sat to Haramosh (*i.e.*, to the Khaltar valley)?"

"Yes; there is a way there."

"Have you been that way?"

"Yes; long ago I came that way from Haramosh. I am a Haramosh wala."

"I want to know about that way to Haramosh. Is it a hard road?"

"No, it is quite easy."

"Do you go over snow to get to Haramosh?"

"Now you must go over snow, but when the apricots are ripe (end of June) there will be no snow."

"You start from Sat to go that way, do you not? What is the next place you come to?"

"Burchi. If a man walks from morning till noon up this side (right bank) of the valley he comes to Burchi."

"And then what do you come to next?"

"Gargo, where the goats and cattle go. It is a fine maidan."

"You must go through Gargo, then, to reach Haramosh?"

"Yes, you go up a nala and over the mountain."

"How far is it from Gargo to Haramosh?"

"It is near." *

"You say that from Sat to Gargo is one march. Is Gargo to Haramosh more or less than Sat to Gargo?"

"Sat to Gargo, Gargo to Haramosh, same thing."

"Now tell me about Rakipushi. Which is Rakipushi?"

"All together; that, there!" pointing to the Chiring buttress, whose top was buried in clouds.

"What does Rakipushi mean? Why is it called Raki-pushi?"

"It used to be called Pushi; but the day Raki died, and

* By *nazdik* (near) they generally meant not more than one good day's march. Anything less than a *parao* (day's march) was always merely *nazdik*.

for many days after, it made great burstings and noises, and went Bum, Bum."

"And who was Raki?"

"He was the grandfather of Safer Khan, the shikari of Bulchi. He was a Hindu winebibber. That was before we were Mohammedans here. He came from Chilas way—from Rakiot. He came to Belchar, up there. My ancestors gave him land there, but he came down saying, 'The land is bad,' and then he settled in Bulchi. That was in the time of the Raja (Sekunder Khan), before Gohr Aman." *

"Where did he die?"

"We don't know."

"Is there no Ziarat of his hereabouts?"

"Of course not. He was a Hindu. He was not buried; they burnt his body."

"Well, so when Raki died Pushi made noises, and that is why you call the mountain Rakipushi?"

"Yes, that is so. There are fairies living there. When the sun shines hotly it smokes up there, and that shows when the fairies are cooking their bread. At noon every fine day it always smokes there—every day."

"What does Pushi mean?"

"Pushi is this," showing the remains of a boil on his arm; "it was called Pushi because the white smoke comes out of it like stuff out of a boil."

* Gohr Aman, Raja of Yasin, established himself at Gilgit in 1841. "Like many of the Khushwakte family, he seems to have possessed considerable energy and ability, but his bloodthirsty cruelty, which seemed to be directed especially against the people of Gilgit, threatened to depopulate the country. Whole villages were driven into slavery, and whole districts ruined, apparently to gratify his resentment. The misery inflicted by this man is almost beyond belief, and his name is still never mentioned without horror. . . . It was therefore with much gratitude that the people welcomed a Sikh force . . . which had been despatched by the Governor of Cashmere. They were at first repulsed, but advancing a second time they defeated Gohr Aman, and installed Karim Khan as Ra of Gilgit, under their protection, in September, 1842" (Biddulph's "Tribes of the Hindu Koosh," p. 138).

"Are there names for those hills there?" pointing to the Uchubagan pass.

"Yes, up that way there used to be little fields, called Uchubagan, and we call all that hill (south of Uchubagan pass) Uchubagan. You can see it from Sinakar."

"And have you any other names?"

"Yes, that hill there behind Sat, that is called Atara. All that hill with the trees on it is Atara."

"And the great snow behind Atara, has it a name?"

"Yes, it is Dubanni."

"Do fairies live there too?"

"On all the snowy peaks where clouds come, there the fairies live."

"We have come here to make the acquaintance of your fairies."

"That is very dangerous. The idiots and madmen at Bulchi are possessed by the fairies that live on the tops of all the snow."

"Now I want to know about your valley. Why are so many fields waste and uncultivated?"

"It is because we have so much else to do, carrying wood and things to Gilgit."

"When did you last have war in the valley?"

"When the men of Sinakar fought with Raja Gohr Aman of Gilgit. He came against them and besieged Sinakar for many months and could not take the fort. The men of Sinakar held out against him till they had eaten the shoes off their feet, and only then did he take the fort and lay it waste. That was a long, long time ago."

This conversation occupied an hour or more; the whole of it would be far too long to report. I still had a great deal of writing to do, and the map to ink in, so was forced to arrange for one more day's halt in camp. I went early to sleep and was presently awakened by a noise, as of a cat and dog fight, to which Pristi added his barking. What the animals engaged may have been I know not, but there are said to be lynxes in the Dirran woods.

May 21st.—I worked in camp all day, and it turned out well that I arranged to do so, for the weather became hopelessly bad again, rain fell in the camp, and plenty of fresh snow above the level of 13,000 feet. I determined, wisely, as events proved, to abandon the attempt to force a passage over the Bagrot pass under existing circumstances. The time could be better employed in surveying the Gargo glaciers, so I sent for coolies to come up at an early hour next morning and carry our things across to the other side of the valley.

May 22nd.—Roberts, McCormick, Roudebush, Zurbriggen, and I, with Habiba, Salama, and eight coolies, left camp at 7.15 a.m. in weather that was far from promising. Eckenstein was still unwell at Dirran, and Bruce at Kamar, so we left Rahim Ali, the Gurkhas, and the other servants with them to come on when they could. My intention was to camp at Gargo and to sketch a survey of the mountains and glaciers up to the frontiers of Nagyr and Khaltar. I noticed from the Bari Rung that the Emerald peak seemed to be accessible, and that there was a promising saddle west of it, which might be traversable to Nagyr or one of its tributary valleys.

We descended stony ways between the left moraine of the Bagrot glacier and the Dirran hillside. Three-quarters of an hour brought us to the village of Sat,* where we caught up the coolies, and halted for a while, continuing yesterday's talk with a knot of villagers, all decent folk, anxious to please. They gave us the names of localities, which will be found upon the map. They said that the men of Bulchi are about half Shina, half Yeshkun, but that the population of the rest of the valley is Yeshkun, and so are the people of Dainyor valley. Raki, they

* The following plants were collected near Sat:—*Potentilla desertorum*, a species of *Astragalus*, *Astragalus Royleanus*, *Draba stenocarpa*, *Callianthemum cachemirianum*, *Anemone albana*, *Androsace septentrionalis*, *Chorispora sibirica*, a species of *Polytrichum*, *Daphne oleoides*, *Rosa macrophylla*, and *Myricaria elegans*.

said, was a Shin, and the founder of an important local family.

We quitted the pleasant fields of Sat with regret and began ascending the right side of the valley; we walked slowly and kept the excellent coolies in front of us. They were the best lot we ever had. Half an hour or so further on we crossed the torrent from the Dirran glacier, and a little before ten o'clock reached the foot of the stone-covered Gargo glacier. Our way led right over this. An uninitiated person would probably not have suspected that the *débris* under his feet covered a river of ice, for there was a well-marked track, with stone-men at intervals to point the way, and there were plants growing wherever sufficient soil had accumulated. Rarely, a small crevasse made the ice beneath visible. The *débris* consisted of fragments of a great variety of rocks and quantities of water-rolled pebbles.

The crossing of this gently inclined wilderness was tedious. We wondered at the pace maintained by the burdened coolies. After three hours of stumbling and halting progress we approached the mouth of the grassy, wooded side valley, up which lies the route to the Gargo pass. The end of our march was at hand. A quarter of an hour later we had clambered on to the left lateral moraine,* from which the glacier has considerably shrunk away. At one time the mouth of the Gargo valley was blocked across by this moraine, and a considerable lake was formed behind it. The lake is now silted up, and the flat meadow thus formed is the maidan of Gargo. A remnant of the lake, decked with icebergs, still lingers between the glacier and the hillside.

No sooner was our little camp pitched in a hollow of the moraine (11,335 feet) than heavy rain began to fall and thunder rolled amongst the surrounding hills. Thunder is

* The following plants were found on the moraine near Gargo Camp :—*Potentilla desertorum*, *Astragalus* near *A. oxyodon*, *Sisymbrium mollissimum*.

a rare phenomenon north of the Burzil pass; in fact, we were informed that it was unknown. We heard it several times whilst we were at Gargo, but never again as long as we were in India.

When the rain stopped, the afternoon was wearing to a close. Roberts and I wandered over to the maidan to see if it would be a suitable place for measuring a base line. We strolled up a knoll behind it when the clouds began to grow thin. Ghosts of white mountains shone in sunlight through veils of mist. Strange revelations of icefalls appeared where we thought to find the sky. A long ice-clad ridge slowly became visible, stretching up from deep-lying Sat and Dirran to a snowy crown that overlooks Hunza-Nagyr and the bewildering north. Finest of all were the unfoldings of the raiment that clad Pushi's fairies. By almost imperceptible degrees the clouds were wrapped away. First we beheld, all white with new-fallen snow down to Bari Rung, the cliffed buttresses of Chiring, and then—was that faint vision behind it peak or cloud?—we could not tell. At last the whole intervening curtain was drawn aside, and Rakipushi stood forth in all his majesty clear cut against the blue.

As we stood astonished our dreams were interrupted by a whispered call from Zurbriggen: "Herr Conway! Kommen Sie! aber schnell, kommen Sie!" I rushed over to him and grovelled on the ground as he indicated. We peeped over a mound and saw a big red bear steadily crawling up a snow couloir near at hand. Zurbriggen gave me the glass and besought me to keep the beast in view whilst he ran back to camp for a rifle. The bear meanwhile advanced steadily upwards, turned off into a birch and fir jungle by its side, and was lost to view at the moment Zurbriggen and Salama returned. They followed up the tracks till darkness came on, but the bear had heard Roudebush shooting birds, and was off on his travels to a quieter neighbourhood. He was not seen again.

May 23rd.—Roudebush was early astir. He returned to



RAKIPUSHI AND CHIRING CHISH FROM GARGO.

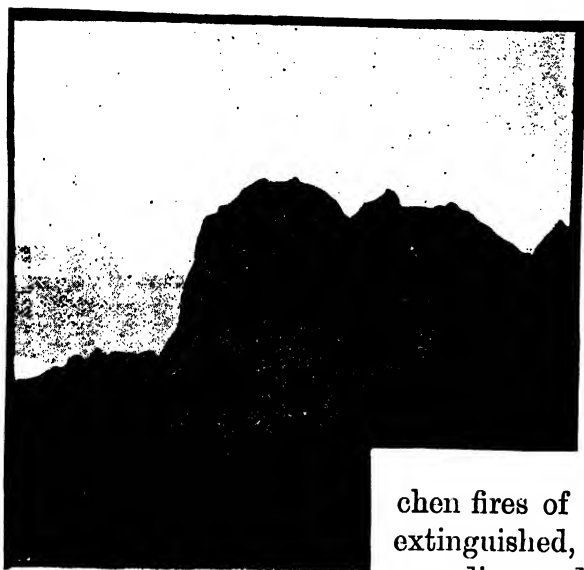
camp, when we were all breakfasting, bringing with him a new-won bearskin and a story which I cannot hope to reproduce. I sent Zurbriggen off up the glacier to prospect for a higher camp, and he too had his bear adventure. He followed the moraine for some distance, took to the glacier, and returned to the moraine at the angle where we afterwards pitched Windy Camp. Coming over the crest of the moraine he suddenly found himself face to face with a bear. The beast stood and looked at him with open mouth, and, said Zurbriggen, "I thought he was coming for me, but I shouted and waved my axe, and, when he saw that, he turned and ran. *Donnerwetter!* Without a rifle I will not wander far again."

When Zurbriggen returned he tackled the wreck of the camera, to which Eckenstein had already done something. With the help of cobbler's wax he made it serviceable once more. It leaked, indeed, and let in a little light through some of its many chinks, but most of them were stopped up, and I was again enabled to take photographs, useful for topographical purposes, though often spoilt for effect by patches of fog. Unfortunately all the negatives I took, up to the time we were leaving Nagyr, were sent down with my spare luggage to Gilgit, and shared its evil fortunes, of which more anon.

I was busy all the morning, laying out a base-line with the kind help of Roberts, McCormick, and Roudebush. A cuckoo kept mocking us at our work. When the line was finished all the peaks were buried in clouds, so observations could not be taken; still there was plenty of work for me to do in camp. A considerable fall in temperature occurred in the afternoon, and the weather began to improve. I was thus enabled, though with half-frozen fingers, to take a round of angles from one of the base stations. My hands ultimately became so cold that I could no longer turn the screws of the theodolite, and it was with difficulty that I got it off its legs, and back into its box.

The clouds melted away even more wonderfully than on

the previous day, for a north wind was prevailing. The sun went down behind a wing of Rakipushi, and made a wonder of the western sky. An arch of mist, over a space of clear yellow patched with iridescent clouds, like flakes of Roman glass, spanned the gap between the peak and Uchubagan. The solid shadow of Rakipushi was cast up into the mist. Swiftly changing lights and colours played magic in the air. The snowy wall around, rising 11,000 feet above our heads, and cleared of every film of



RAKIPUSHI FROM GARGO.

vapour, stood out in appalling sharpness of detail. Never did anything look more hopelessly inaccessible, save at a single breach, named by us Emerald Saddle, than this rampart of Nagyr. The kitchen

fires of all the fairies were extinguished, and their smoke was dispersed. When the cold night cast a mantle of darkness

over the scene we turned away to dine and sleep.

May 24th.—After a bitterly cold night a fine day followed. I spent it in surveying. Roberts took some admirable photographs with his large camera, the only photographs of the Bagrot nala that I possess. He was obliged to leave us for Gilgit in the afternoon, but went, promising to return. The sunset repeated the glories of its predecessor. I sat up far into the night trying to overtake my endless work. I noticed that the temperature was mild again, and augured ill for the morrow.

May 25th.—By ten o'clock the sky clouded over, and

thenceforward the conditions grew steadily worse. We gave up hopes of ever having any settled fine weather, such as the mountains required before they could be climbed. I determined, however, to look closely at the Emerald peak, and make one assault upon it before going back to Gilgit. I accordingly sent Zurbriggen up the glacier to reconnoitre. He took for companion a local coolie, who, when he reached a bit of broken ice, fell a-weeping and begged permission to return, so Zurbriggen went forward alone. The storm fell upon him, but he pushed on to a height of about 13,000 feet; he came back to camp wet through. The weather made surveying impossible.

Towards evening the clouds lifted somewhat, and revealed a mantle of fresh snow reaching down to the tents. Snow also fell in camp, so that we were miserable enough. Provisions began to run short, till we luckily found a forgotten kilta full of delicacies. In the late afternoon McCormick went forth to survey the land. He noticed two dark objects moving, and called to me for the glasses that he might see what they were. I misunderstood him, and shouted to Roudebush, "Two bears!" Before the mistake was discovered the whole camp was in commotion. Grass shoes were put on, guns got ready, and off went Roudebush, Gofara, Habiba, and the coolies to hunt. They returned at dinner-time somewhat crestfallen. The bears were cows!

May 26th.—When I arose at seven o'clock the sky was heavily overcast at a great altitude, but the whole cirque of mountains was sulkily clear. Presently a band of cloud formed across the slopes at a height of about 12,500 feet, and soon developed into an all-obliterating mass. Rain and snow began to fall, and the worst weather prevailed. A hunting party that went forth early returned empty-handed and wet.

About noon the variable heavens seemed to promise better things. I took a hasty lunch, and started with McCormick and a coolie. We mounted the hill behind

Gargo maidan, but took a bad line of route, and had to fight our way through a tangled birch-wood, which gave us infinite trouble. At last we emerged on a ridge,



UPPER BURCHI PEAK FROM GARGO.

and made our way up to a commanding point of view (13,470 feet). But there was no view to be seen. The ascent cost us two hours, and we spent three hours more

sheltering under a rock from driving snow showers. We could do no surveying, but saw some glorious cloud-effects; as once, when the snow was falling heavily, and yet bright sunlight pervaded it, the only solid thing in sight was the birch-pricked snow-slope, enveloped by the sun-illumined snow-fog. We might have been in the midst of a glowing nebula, watching the birth of a world. Though we never saw the mountains around us, the glacier basin below was at times well displayed. We noticed that, where the Gargo and Burchi glaciers unite, at the foot of the Burchi promontory, the medial moraine between them has been broken through at two points by the superior energy of the waxing Burchi tributary, which now flows over the obstacle and on to the surface of its neighbour ice-stream.

I hung a thermometer in the shade at the time of our arrival, and watched with interest its remarkable leaps and falls. At first it settled at 52° Fahr. A gust of cold wind sent it down to 47°. In a lull it rose to 52° again, but when snow began to fall it sank to freezing-point, only to rise rapidly when the snow stopped.

At six o'clock we started down and chose a better way, keeping clear of the birch scrub, and following an avalanche track over grass slopes. Grass grew more strongly, and plants were more numerous in the line of the avalanche than on either side. A green streak with sharply defined edges marked the route taken by the falling snow and *débris*. It was snowing steadily, so we had no bribe to linger. Half an hour took us down to the footpath in the Gargo valley. The rapid descent warmed us and renewed in us the capacity for enjoyment. Then it was that I first noticed the young green, just beginning to deck the silver and red skeletons of the birches. Zurbriggen met us near camp. "I have good news," he said, "for my feet are cold. You must know that when in damp weather I have cold feet, fine weather is at hand."

May 27th.—Notwithstanding Zurbriggen's cold feet, we had again to endure a thoroughly bad day, constant snow

showers in camp, and a heavy fall on the heights. I am, of set purpose, minute and particular in recording the weather, because, as all mountaineers know, this is the matter about which it is hardest to get information from non-climbing folk. We were promised a rainless and snowless season in these parts by men who had spent long periods of time shooting over them. Yet the number of fine days allotted to us was few, and they were so interlarded with bad weather as to be useless for mountaineering purposes. All the time, however, Gilgit was sweltering under cloudless skies, and our friends there thought that we were having perfect weather.

We discussed plans in the morning, and arranged that Roubush and McCormick should go to Dirran Camp, and take every one thence down to Gilgit, sending up to us a few necessaries, and especially the tools which were needed for mending our boots. Zurbruggen and I were to leave next day for Windy Camp, in order to make a final attempt to cross the Emerald pass to Nagyr. After lunch there was accordingly a break-up. Zurbruggen went off to shoot, I to survey, the rest downward. A thunderstorm with all concomitant miseries soon drove me back, and I had no more than set myself down to sorting flowers when Roubush and McCormick returned with Pristi, the obvious herald of the Dirran contingent, who all presently came in, and our party re-assembled instead of scattering.

A clearance in the weather sent McCormick and me off to survey. We went a mile up the glacier, found a suitable station, and set up the plane-table. Promptly the snow came down again, and the landscape was blotted out. We cast a waterproof sheet over the table and crawled beneath it. We sat there in cramped attitudes for two hours, with our feet freezing and our clothes getting wetted in patches by rivers flowing down our wretched roof. We tried standing and holding the sheet aloft with extended arms, but the position was fatiguing, and the results not commensurate with the labour. Ultimately the weather once more cleared,

so we went further on, and accomplished some work before snow began to fall yet again. We returned to the nearest point of the moraine, and found the glacier flush with it, and not shrunk away as it was at camp. This would seem to indicate that the glacier is filling again, and that the snout will begin to advance in a few years' time. The Bagrot glacier, as before remarked, shows corresponding indications.

We followed the moraine down to camp. It is the home of multitudes of plants, not then in blossom, and of various trees—firs, birches, mountain ash, and willows—all of which, except the firs, are found up to a height of about 12,000 feet. The existence of so much vegetation proves that the rainfall in the upper part of the Bagrot valley must be considerable. There is no artificial irrigation even in the maidan at Gargo, and that is a perfectly green meadow. Our companion back to camp was a babbling brook, which drains the small glaciers of the side valleys, and flows along the foot of the moraine.



BONFIRE AT KAMAR.



MORaine AT GARGO.

CHAPTER IX.

GARGO TO GILGIT.

May 28th.—On this day we were to abandon Gargo; the morning was accordingly devoted to packing and other needful preparations. Some baggage was given over into the charge of the lambadhar of Bulchi, some was sent down to Gilgit, some was made ready for the high camp. The utter badness of the weather was our only encouragement; worse it could not become. It snowed, hailed, and thundered all night, and there were two inches of fresh snow around the camp. The clouds showed no immediate intention of dispersing. They hung low on the glacier and covered the hills. At 10.30 McCormick, Roudebush, and Eckenstein started for Gilgit, taking all the spare men with them. By noon Bruce, Zurbriggen, and I, with the Gurkhas and twelve coolies, were ready to push upwards.

We were familiar with the aspect of the mountains towards which our route lay. They stretched across before us—a mighty wall—from the Emerald peak on the right to Rakipushi. Left of the Emerald peak was the pass of our



UPPER AND LOWER BURCHI PEAKS AND EMERALD PEAK FROM BEHIND GARGO.

desires, towards which various parallel arêtes led. Then came the lower and the upper Burchi peaks, and from the last mentioned descended the great Burchi ridge, which formed the right limit of the Gargo glacier. Beyond the Burchi peak was the Crown of Dirran, the point where the Dirran ridge joins the watershed; between the Dirran and Burchi ridges was the deep-lying Burchi glacier, to which reference will hereafter be made. Beyond the ridge and Crown of Dirran were the glacier and saddle of Bagrot, and then Rakipushi, with all which the reader is now sufficiently acquainted.

As we advanced up the moraine, we had, therefore, before us the Emerald pass and its glacier curtain falling into the Gargo glacier. The main upper basin of the Gargo glacier was not in sight. It bent away eastwards, round the corner where we were going to camp, and its final amphitheatre, as we afterwards discovered, was backed, not against the Emerald peak, but the ridge dividing Gargo from Khaltar.

We soon quitted the moraine for the ice, and, making a long zigzag, crossed to the right bank and back to the afore-mentioned angle. We climbed on to the moraine again, and in a few minutes reached Windy Camp (12,610 feet), the place of Zurbriggen's bear adventure, and the situation selected by him for our tents. It was a small flat meadow of rank grass, surrounded by winter snow, wherein bears had trodden their tracks. All the glacier we traversed was moraine-covered, very tedious and difficult for the coolies. A snow-storm overtook us on the road, to the manifest disgust of Zurbriggen. "Bah!" he said, "the weather is not here as it is in my country. There, when it has been bad all the week, it usually clears up on Saturday, but here Saturdays are the worst of all."

We noticed that the tributary glaciers to the east were greatly shrunken, after the manner of Alpine glaciers; but the main ice-stream at the Windy angle was filling up and washing right over the moraine it had deposited in its recent reduced condition. In former days, as other moraines

proved, it was piled against the neighbouring rock wall, yet that bore neither scratchings nor polishings such as one usually observes where glaciers have been. Doubtless, rapid aerial denudation has removed the ice-worn surface of the rock.

We found no plants in blossom at the angle, but there were plenty that would brighten the hillside in a month's time. The coolies arrived one by one, thanks to the energy of the Gurkhas, who worked the more admirably the more their energies were called upon, and the less usual the conditions by which they were surrounded. Another storm threatened to burst, so we pitched the tents in haste; but the alarm was false. The weather began to mend from the moment of our arrival, and one by one the great peaks looked forth. The Burchi peaks appeared first, then the fine Emerald mountain, which we had come to woo. Close before us were the seracs of the Gargo glacier; beyond them the mighty wall swept grandly aloft to a height of upwards of 20,000 feet. The only visible outlet to the deep basin in which we lay was a narrow glimpse down the valley to the west.

A change was taking place in the upper air, accompanied by strange writhings and whirlings of the mists. The cloud procession from the south-west, which had been defiling so persistently across the heavens, was now turned back, and a strong cold wind from the north-west cleared the sky and lifted the new-fallen snow in sheets from the high ridges. Temperature fell, and the air became crisp. The sun went down; the hilltops grew first golden, then pink; the clouds in the west caught fire. The new moon peeped over the crest of the mountains, and the auguries were favourable. As the frost obtained power, enormous avalanches began to fall in quick succession, not merely down their orthodox couloirs, but enveloping all the width of the hills, burying the minor ridges out of sight, and sending up clouds of dust that were carried two miles and more before they dispersed. I reckoned that one of these avalanches fell

8,000 feet, and that its solid part was a quarter of a mile broad at the base. The solid part, however, was hidden out of sight, as it fell, by a monstrous dust cloud, like a vast downward rolling puff of steam, which muffled the noise and turned it into a fine booming thunder. Such titanic artillery continued to salute till far into the night.

May 29th.—The survey was, of course, my day's work. The others were to begin the assault on the peak or pass by carrying up a store of provisions to as high a point as they could reach. We were all early on the move, quickened to action by a gale of wind, which sprang up suddenly, and so violently agitated the tents that it seemed as though they must be blown away. The quickly running stream, that on the previous evening made music through the camp, was bound in icy bonds by frost. The minimum temperature during the night was 15° Fahr. At six o'clock, when the others started, the gale was at its height. The tents flapped and bulged and strained, snow was whirling off the heights, and all the air was darkened by it. In one instant the wind ceased, the sun came over the edge of the hill and drove the frost away, the brook began to tinkle again, a cuckoo called from the birch scrub across the glacier, and a bumble-bee droned round the tents. A more sudden change it would be impossible to imagine. The sun was soon too hot, and within two hours the temperature in the tent was 80° Fahr.

I waded up the hill behind Windy Camp through soft new snow, found a good station, and did my work. The riven floor of the upper basin of the Gargo glacier was at my feet, and the great snowy wall was before me clear from top to bottom, a mass of steep arêtes and couloirs, of ice-slopes, hanging glaciers, and precipitous icefalls, here and there broken by islands of rock.

After a solitary lunch in camp I went on to the glacier, and crossed it through an intricate maze of crevasses till I reached a position that commanded a view up to the col at its head, leading to the upper basin of Khaltar. The ice descends in a chaos of seracs from the highest plateau of

nevé to within a mile of Windy Camp. It would be easy to find a way up the side of this icefall to the saddle, which would make a splendid pass. A gossamer veil of glittering ice-thread, extraordinarily lovely, and formed doubtless by wind and frost, covered the surface of the glacier where I crossed it. This soon melted away.*



GOING SURVEYING

We all arrived in camp together. Zurbriggen was satisfied that the peak would be ours if one day of fine weather was granted to free it of the fresh snow and two more for the climb. The north wind was holding and the sky remained clear. Frost set in as soon as the Burchi ridge hid the sun. The mountains seemed to grow in the twilight; their grandeur astounded and overwhelmed me. The new moon, Venus, and the Twins were like jewels upon their crest. We turned in late, as there was time to spare. One more fine day was needed to make our proposed ascent safe, and all the boots of the party required mend-

ing before we cut ourselves adrift from the tool-chest. A long night was therefore before us, but the flapping of the tents in another gale, and the ceaseless booming of avalanches, kept sleep away for many hours.

May 30th.—The tents were still flapping, and the ropes

* On the moraine I gathered *Cheiranthus himalaicus*.

and poles groaning and creaking when we awoke, but, as usual, the gale suddenly dropped, and peace and frost reigned together. Pleasant it was to look forward to a day of rest with superb weather, and the mountains coming rapidly into condition. Now at length, we said, the good time has come. We lapsed into repose. Two coolies arrived bringing kiltas of luxuries, sent up by Roberts from Gilgit. They also brought newspapers and letters from home, so that time did not hang heavy on our hands. Zurbriggen established his shoe-mending stall in the midst of a ring of Gurkhas. The hammering of nails was accompanied by a merry conversation in such broken English as they possessed in common. Meanwhile the glaciers were hard at work, seracs tumbled, and great avalanches swept the slopes. I observed that the noise of a fall was not proportional to the volume of snow, but depended on the steepness of the track. Vertical precipices caused the great booms, and of such there were plenty on the Burchi peak. Couloirs growled as the snow rushed down them; the slopes at the bottom hissed. Clouds of snow-dust filled the air all day. The hours fled too rapidly, and night was upon us before we were half ready for it.

May 31st.—The new day damped our hopes of fine weather. The northerly wind ceased to blow, and the south-west again won the sky. Snow and storm, I felt sure, would overtake us and drive us down. Nevertheless we refused to turn back without a final effort. Zurbriggen and I left camp a few minutes before five o'clock; Bruce, Shahbana, and the four Gurkhas followed at a short interval. We crossed the glacier to the foot of the great icefall from the Emerald pass, and in three-quarters of an hour we were close to the edge of a meadow from which our buttress sprang. Zurbriggen and I had no more than set foot upon the grass, when we beheld a huge avalanche-cloud descending over the whole width of the icefall, utterly enveloping both it and a small rock-rib and couloir beside it. Bruce and the Gurkhas were below the rib, and

could only see up the couloir. They thought the avalanche was a small one confined to it, and so they turned back and ran towards the foot of the icefall. This was no improvement in position, and there was nothing for them to do then but to run straight away from it, and get as far out on to the flat glacier as they could. The fall started from the very top of the Lower Burchi peak, and tumbled on to the plateau above the icefall; it flowed over



RUNNING FROM THE DUST AVALANCHE.

this, and came down the icefall itself. We saw the cloud before we heard the noise, and then it only reached us as a distant rumble. We had no means of guessing the amount of solid snow and ice that there might be in the heart of the cloud. The rumble increased in loudness, and was soon a thunder that swallowed up our puny shouts, so that Bruce could not hear our warning. Had he heard he could easily have reached the sheltered position we gained before the cloud came on him. Zurbriggen and I cast ourselves upon our faces, but only the edge of the cloud and an ordinary strong wind reached us. Our companions were entirely enveloped in it. They afterwards described to us how they raced away like wild men, jumping crevasses which they could not have cleared in cold blood. When the snow dust enveloped them, the wind raised by it cast them headlong on the ice. This, however, was the worst that happened. The snow peppered them all over, and soaked them to the skin, but the solid part of the

avalanche was happily arrested in the midst of the icefall, and never came in sight. When the fog cleared they were all so out of breath that for some minutes they could only stand and regard one another in panting silence. They presently rejoined us, and we halted for a time on the pleasant grass.

The musical cry of chukor reached our ears from all directions. The ground we lay on was covered with matted vegetation and withered leaves, pressed and pounded together by winter avalanches, lately melted away. Young shoots were just forcing up their heads here and there. We found *edelweiss* on this buttress up to 14,000 feet. *Sedum* was common to 13,800 feet. Flocks of a bird that flew like a fieldfare darted about not far away. Spring had come even to the heart of this icy kingdom. But the weather was growing hourly worse. The air was not fresh; the sun shone sickly in the leaden sky. The view up the wilderness of seracs towards the head of the glacier attracted our attention, and the more so that we thought it would soon be blotted out. There were indications that, though the basin might be fuller of snow than it recently had been, it once was very much more full.

We started on again at 6.15, and continued mounting and traversing grass-slopes for twenty minutes, to the couloir* beyond them and the buttress rising from them. We put on our climbing-irons, and commenced the steep ascent. The snow was firm. We plodded steadily and toilsomely up it, keeping close to the rocks† of the rib on our left, so as to be able to take refuge amongst them from the avalanches for which the couloir is a highway. In three-quarters of an hour we reached the cleft (15,370 feet), where Bruce had hidden the provisions. Naturally we halted to sample them and curse the weather. In

* A *couloir* is a more or less steeply inclined gully, usually with a stripe or floor of snow down it. Couloirs are generally, at some time of year, the track of snow or ice-avalanches, sometimes only of falling stones.

† *Mertensia primuloides* was found growing here.

the south-west we could see the storm brewing. It was evidently not worth while to climb much higher. Twenty minutes further up we found a fairly good shelf, safe from avalanches, and there we determined to stop at a height of 15,680 feet. Zurbriggen was permitted to go aloft and explore the further route. He went on about 1,000 feet, found no difficulty, and returned.

Meanwhile we were all busy, levelling and building up the tent platform, cutting away icicles, and setting up the little tent. A place had also to be made for the Gurkhas, and a wall of snow and stones built round it. They had a mackintosh sheet for a floor and another for a roof. With their blankets and their mutual warmth they were comfortable enough, and a merry time they seemed to have of it. We called the place Sulphur Camp, from some yellow stuff found in the rocks.

When everything was in order we began taking our observations. Bruce's temperature and mine were both normal, notwithstanding that we plainly felt, and continued to feel all the time we remained at this camp, discomfort from the reduced atmospheric pressure. Every man of the party suffered from headache. Our pulses beat with more than usual rapidity, and the tracings of them made with the sphygmograph differed from tracings made at lower levels.* Zurbriggen found that during his last 1,000 feet of ascent he had to travel more slowly than he was accustomed. We all felt a disinclination to do anything that involved change of position, and it required an effort of will to get up and read the barometer and other instruments. We had a tendency to place ourselves in such attitudes as left the chest most free, and I observed that during the latter part of the ascent I walked more easily with my hands resting on my hips than hanging by my sides. Bruce desired to take occasional deep inspirations. My fatigue, and the feeling of weight in the legs, was immediately diminished if, in walking

* I sent these and twenty other tracings home by post from Gilgit, but they never reached England,

uphill, I breathed more deeply and rapidly than usual ; but to keep this up one's breathing muscles must be got into training, which takes time. We never afterwards experienced so much discomfort at so low a level.

The sky became overcast with ever denser cumuli, but, as yet, they floated at a high altitude, clear over Dubanni's 20,000 feet. The view was still splendid, though not wide in extent. The couloir, some 200 yards broad, swept grandly past us, and spread its white skirt on the glacier below. The highest of the Gargo peaks, a greater Lyskamm, lined the far side of the nevé basin and shut out all the prospect in the direction of Haramosh ; to the right of it was the cluster of Dubanni's sharp-edged peaks, the brilliant Brand, which used to look down upon us at Gargo, standing out before them. Still further to the right a glimpse was caught of the moraine-covered glacier, and beyond it the intersecting slopes that rise above Gilgit, whilst further off was the opening of the Karga nala and the snowy peaks of Darel, whence came the hateful, moisture-laden current that threatened us with defeat.

As we were discussing the future we heard a crash high up in the couloir, followed by the boom of an approaching avalanche. A mass of ice had fallen from the cliff at the top, and was ploughing its way down to the glacier. It seemed ages before it came in sight. It passed in two streams of mighty flow. Suddenly one of the Gurkhas jumped up, crying, "Ibex ! Ibex !" and sure enough there was one poor beast carried down in the resistless torrent. "Another ! another ! Two ! Three ! Four !" There was in fact a whole small herd of them, all dead. They must have been passing under the ice-cliff when the fall occurred. One of them was ultimately pitched out of the side of the avalanche and left upon the snow-slope, but the others were carried to the foot of the couloir and buried, hopelessly beyond discovery.

Zurbriggen, Parbir, and Amar Sing started down after the dead animal, all headaches notwithstanding. Amar

Sing in his haste tried to glissade, but being unfamiliar with the ways of couloirs, he got into the icy trough of the avalanche, lost his footing and his axe, and went rattling down at an accelerating pace. He turned over on to his face, and clutched wildly at the ice, thereby breaking all his nails and filing off the ends of his fingers. Fortunately some bulge in the surface of the ice tossed him out of



AMAR SING'S GLISSADE.

the trough into a heap of soft snow, where he stuck, after falling 200 feet or more. His sorry plight did not prevent him from continuing the descent, but he and his fellows had learnt a lesson and went more carefully in future. This little accident gave them a respect for mountains, which increased with their experience and their growing skill.

They found the carcase of the doe and cut it up, delighted with the prospect of joints. They packed them away in a marked place and returned to camp. The short remainder of the day was soon over.

At six o'clock we tucked ourselves up for the night. From time to time we heard Amar Sing chuckling with laughter as he thought of his adventure, and for the next few days he could not look at his fingers without giving vocal expression to his amusement.

June 1st.—All night long it snowed with persistence of ill intent. In the morning a white mantle enveloped the

mountain; and the new snow was four inches thick about the camp. The temperature had not fallen below 22° Fahr. We perceived that the possibility of making an ascent was for the time removed. We decided to wait a while and see how the weather behaved. We thought that there were signs of improvement. . Dubanni presently looked forth at us, with silver flanks all ablaze in the sunlight. But our hopes were soon dashed. Banks of dark cloud came rolling up from Gilgit, and the landscape was blotted out again. We said nothing to one another, and with a common understanding, all began to pack. It seemed even possible that, if avalanches began to fall, our retreat might be cut off.

After a hasty breakfast we pitched our soft baggage into the couloir and sent the bundles rolling down. One reached the glacier, the other stuck near the ibex. About nine o'clock we quitted our platform, and between running and glissading reached the level ice in forty minutes. We left two Gurkhas behind to search for the other carcasses, and Pristi came up and joined them. Shahbana brought him a little way from Windy Camp, when he caught sight of us far aloft and came across the glacier and up the slope, all on his own account. The united intelligences of men and dog failed to discover the buried beasts, but, as the Gurkhas were nearly overwhelmed by an avalanche, which fell while they were searching, they considered the day not altogether wasted. Drenched to the skin, they followed us to camp.

Bruce, whose carrying capacity is about equal to that of a goods train, loaded up three heavy *rucksacks* and bore them over the glacier. Shahbana met us on the bank (13,400 feet) with a coolie or two, and lightened our burdens. We kept meeting coolies every hundred yards or so, and shedding our bundles one by one. Scarcely had we reached Windy Camp again, and been served with the hot meal that Rahim Ali prepared for us when he saw us coming, than all the miseries of the skies began to be

poured out. Sleet, snow, rain, hail took their turns, and the angriest gusts of chilly wind drove them about. We kept under shelter for some three hours till the gale had blown itself off, and then we packed everything up and hurried away to a less inclement neighbourhood.

We retraced our steps for half an hour, as though

going back to Gargo, then struck across the glacier to its right bank, where we climbed on to the great moraine, deposited round the curve of the glacier's turning, and at some distance from the foot of the hill-slope. This interval is filled with wood, and, further on, with an open grassy maidan, belonging to the summer settlement of Burchi (11,075 feet). Horses and cattle were grazing on it, and the vegetation looked fresh and vigorous after the rain. We reached this point



A HEAVY LOAD.

after an hour and three-quarter's walking. The situation was magnificent, close to the foot of the Burchi glacier,* which alone remained to be added to the map in order to

* The following plants were found in the immediate neighbourhood of Burchi:—*Cicer soongarica*, *Astragalus strictus*, *Fragaria vesca*, *Myosotis sylvatica*, *Androsace villosa*, *Gentiana argentea*, *Polygonum viviparum*, and others,

make it complete. Camp was accordingly pitched; and thereupon the rain once more descended in such torrents that we could not but congratulate ourselves on our decision to retreat from the inhospitable snows.

June 2nd.—A so-called "idle" day in camp. Bruce and Zurbriggen at an early hour reconsidered their decision to go forth after ibex or bear, and thus it came to pass that all breakfasted together at the late hour of seven. Our rugs, clothes, bags, and everything that could hold moisture were in a wet condition, and had to be dried in the intervals between showers. After breakfast I availed myself of a temporary clearing to take a round of angles with the theodolite and to set up the plane-table. Rain drove me into the tent, where I worked at inking in the map. Then I catalogued and packed the geological specimens, changed the paper between the flowers that were being pressed, varnished the sphygmograph tracings made at Sulphur Camp, and took a new series. A hot bath followed, and then lunch, to which Bruce came with a specimen of the rocks from a precipice 500 feet above us. After lunch we talked awhile before sitting down to three hours of journal-writing, during which the rain poured steadily. At half-past five the weather cleared, and I mounted to the top of the left lateral moraine of the Burchi glacier and worked for an hour at the plane-table, taking advantage of varying gaps in the clouds. The moraine is a very high one (about 500 feet), and the ascent of it took about half an hour. From it (11,550 feet) we could look up into the heart of the deep-lying Burchi ice-stream and see, at its head, the grand cirque of snow walls which support the Crown of Dirran and the Burchi peak. Precipitous buttresses hem the glacier in. A great icefall cuts it in half with a cliff of ice 100 feet high and reaching from side to side. The seracs below this cliff were enormous. The plateau above the icefall is the dumping-ground of avalanches from three sides. It appeared to be inaccessible from below, and on every yard of it one would be in danger of burial under falling masses

of snow. It would be hard to find a more enclosed sanctuary or one where Nature nurses sterner moods.

As evening came on the clouds closed in once more. We returned to camp and found dinner awaiting us.

June 3rd.—Rain was falling heavily at four o'clock, so we postponed our departure till 6.30. We brushed our way through damp grass and climbed the moraine at a lower point than on the previous day, forcing a path through a tangle of thorny barberries, amongst which little birds, like redstarts, fluttered about. The Burchi glacier, like that of Gargo, is wholly covered with moraine over its lower half. We climbed on to its right lateral moraine and halted to survey, but the view was everywhere obscured. We now descended into a lovely wood, whose foliage was varnished with wet. We found and followed an admirable path through it to the village of Dar, near the mouth of the side-valley descending from the Dome of Dirran. The good path continued to Sat, which we reached shortly before nine o'clock.

We had now seen the whole of the lovely basin at the head of the Bagrot valley, and had been the first to penetrate its imposing recesses. In spite of ill luck we felt that something had been accomplished. Content at heart, therefore, we started away and wandered amongst blossoming rose-bushes and other fragrant shrubs. The air became warmer; the damp was being absorbed from our garments, but the matches in our pockets were still too moist to light when struck. Indian matches, however, are the worst in the world. They are of the sulphur sort, tipped with inefficient pink points. Sometimes they refuse to burn even when thrown into the fire.

Ten minutes beyond Sat we crossed the bridge over the Gargo stream, opposite the foot of the left moraine of the Bagrot glacier. Another ten minutes and we were in the narrows, between the ice of the glacier's snout and the angle of the Gargo valley. A serac had fallen across the path a few days before, but since then the glacier had

shrunk away as much as 40 feet. Zurbriggen was astounded at the changes that had taken place in the ice since he was at this spot on the day of our arrival. He said that the place was not recognisably the same. The Gargo stream here passes through a tunnel under the ice.

All the flowers we found near Sat (except the flowering shrubs) were the same that grow in greater profusion at Burchi and Gargo. They appeared to be stragglers from above and not climbers from below. It was only after passing Bulchi that we met the valley flora and left the mountain flora behind.* At 10.30 we crossed a crazy bridge spanning the united Bagrot river. It was formed of three slender trees, which bent like bows under our alternate feet and made our equilibrium unstable. The rushing waters beneath added to my own mental disturbance.

A few minutes beyond the bridge, Zurbriggen and I reached Bulchi, where we found Bruce reclining on a carpet under the walnut trees and luxuriously banqueting on dried apricots and milk. The villagers were come together, the children wearing garlands of flowers round their caps. We seized the occasion to make formal presentation of a Peshawar *lunghi* to Rustem Khan, the helpful lambadhar, or village headman, who so well looked after our wants. Rahim Ali swathed the man's head in the long folds. For the remainder of the day he was grinning with delight. There was of course music and the usual *tamasha*. All the sick people came in, but, fortunately for them, there was nothing left in the kiltas that we could pretend was medicine.

We lunched wisely and well. At noon the hot part of our walk began. Shady Bulchi was left behind and the desert valley entered. There was no loitering on the way. Thirst came upon us, and the hateful sun, which hid itself when we needed it, now intruded its unwelcome presence. How we rushed at the water when we reached a cool stream which crossed the path at Datuchi; and

* *Sophora alopecurides* was common between Sat and Sinakar.

how we regretted not to have drunk more of it, as we climbed the long uphill between that oasis and the high point whence one descends upon Sinakar! Pristi suffered most. He again took to bolting from one shady stone to another, panting the while so that he could be heard a hundred yards off. When he ultimately found a muddy patch at the edge of Sinakar he wallowed in it like a hog.

The villagers led us to the south border of the place, where, on an uncultivated field, I was sorry to find Roberts encamped. He was coming up to join us, and had now accomplished the first horrible march, all to no purpose. When camp was pitched beside him, a wind sprang up and blew dust into our tents and eyes, making everything gritty. Flies came upon us in their thousands, heralding the hot lowlands. The sky was black with impending clouds; thunder rumbled in the distance; but the rain passed by, and the air was not cooled. We separated early to rest, looking forward with dislike to the morrow's odious march.

June 4th.—We started, none too early, at 5.30 a.m., the morning being dull, and, so far, kindly towards us. I passed a native, who looked like a fifteenth century Florentine S. Giovanni, standing in an attitude suitable for a "Holy Conversation." He asked me to be good enough to order him about, but I could conceive of no better use for him than to go on standing where he was. In an hour we reached a place of rocks and boulders called Bidili Giri, where the coolies are wont to halt. Another hour brought us to the little Ziarat, amongst the traces of long-abandoned fields at the opening into the Gilgit valley and between the almost buried moraines.

The morning had thus far been cool (73° Fahr. at 8.15 a.m.), but now the sun became unclouded and the sandy pathway filed before us. We toiled over it for almost two hours, sometimes halting in thirsty misery, but not daring to linger, as each hour was hotter and thirstier than the one that went before. At ten o'clock we gained the oasis

of Dainyor and the shade. The sun, finding he could annoy us no more, went behind clouds, and the temperature again sank to 73° Fahr. We sat for three-quarters of an hour under the mulberries and walnuts and on the trailing vine-trunks where we rested on our upward way. A quarter of an hour took us to the rope-bridge, and half an hour later we were all over it. This crossing was less pleasant than the former. The bridge dipped into the roaring torrent, so that the water came up to the calf of one's leg. The cables had thus been strained and some of them broken, and the gaps patched up with goat-hair cord. Pristi crossed last; he was rolled up in a blanket on a coolie's back and patiently abode his discomforts.

By Roberts' kind arrangement ponies met us at the bridge. The one I rode was brought over the Pamirs in Littledale's caravan. We cantered the rest of the way. Roberts led, and I blindly followed him, wondering from moment to moment why my neck was not broken, for the path lay, for the most part, over a chaos of big stones, and was never straight or level for five yards together in the stony places. We reached the Gilgit bridge in twenty-five minutes, passed McCormick and Roudebush just beyond it, and were at the Residency five minutes later. I changed into some of the old clothes left behind by Lennard when he came from Yarkand, lit my pipe with Russian matches brought by Younghusband from Kashgar, and spent the rest of the day in pleasant idleness. Colonel Durand had gone down to Simla. His place was taken by Dr. Robertson, whose wonderful journey to, and residence in, Kafiristan excited my most enthusiastic admiration. The pleasure of dining at his table was one of the greatest I experienced in Asia.

June 5th to 7th.—We stayed three whole days at Gilgit. The first was devoted to finishing the Bagrot map, which Roberts kindly photographed for me. Thereupon succeeded twenty-four hours of some strange illness, similar to that which overcame me on the second day of my previous visit.

It came on suddenly, and as suddenly went away. The time it lasted is a blank in my memory, save for a general reminiscence of Roberts' constant kindness, to which my rapid recovery was doubtless due.

On the 7th, Eckenstein came in from the Dainyor valley, which he visited for the purpose of a prismatic compass survey. Clouds impeded his work, so that his observations could not be incorporated in the map. Dickin left us during my illness. He hired fifteen Balti coolies by the month, and went away towards the Kilik pass, hoping to collect birds. He had been, and still was, unwell. He ultimately reached *Ovis Poli* ground, but was entirely prostrated by sciatica, and could only pick up some heads and return. We did not see him again till we met in London.

I was busy all day classifying and packing the baggage, now reduced to forty-four loads. There were also six loads to be left behind at Gilgit till our return, or sent to meet us in Srinagar. Lient. Duncan, the transport officer, explained to me that the supply of provisions in Hunza-Nagyr was running short, and that the natives were averse to carrying, so that our baggage and servants must be reduced to a minimum. Our intention was to go to the foot of the Hispar glacier, and there divide into two parties, one of which should cross the Nushik, the other the Hispar pass; we were to reunite at Askole in Baltistan. Some of our baggage, therefore, might be sent direct to Askole by way of the Indus valley. That would, at all events, save the Nagyr coolies at the expense of inconvenience to ourselves. The shikaris and all but one of the servants could also be spared. I understood that there were, at the time, no Balti coolies left at Gilgit, but I also understood, wrongly as I have since been informed, that arrangements would unfailingly be made to send the baggage in time to meet us (there was plenty of time to spare), and I accordingly set to work to diminish the amount to be taken through Nagyr to a degree that, as things turned out, seriously interfered with the expedition.

I am obliged to be thus particular with respect to this matter, because the failure of the baggage to meet me gave rise to misunderstandings, which, I hope, have since been satisfactorily set at rest. It is necessary to tell the whole story, and get rid of it once for all.

Roudebush's baggage was ruthlessly sacrificed. His tent, his clothes, his stores were all left behind. Our kitchen utensils were reduced to a minimum. I left a heavy weight of rupees, spare instruments, the legs of the developing tent,* warm wraps, clothes, all appliances for comfort, the photograph films that had been exposed, the collection of plants† and insects made in Bagrot, and the geological specimens. I also sent back from Nagyr a load of things no longer needed, or collected between Gilgit and that place.

Hearing, at Baltit, on the 18th of June, that neither servants nor baggage had left Gilgit, and discovering that the natives of Nagyr were willing to carry all our things over the Nushik pass, I wrote down to Gilgit for everything to come up, except one of the shikaris, who was to go to Rondu and turn back the Srinagar-Askole baggage which, contrary to written orders, the tehsildar of Skardo was forwarding to Gilgit instead of Askole. Rahim Ali and two servants accordingly came up and met us at Mir, but they only brought a few loads with them; the bulk still remained behind. I wrote urging that it should be sent off, if not to Askole, at least to Skardo, whence, if necessary, coolies could be telegraphed for to fetch it.

On July 13th Roudebush was sent with all our spare baggage over the Nushik La; he had orders to proceed to

* These were brought as duplicates for the theodolite and plane-table. The tent itself went from Srinagar to Askole. The non-arrival of these legs at Askole rendered the tent useless, and prevented me from testing my films by development. I thus did not discover the serious depreciation of the hand camera. About five hundred negatives were spoiled in consequence, many of them of high importance.

† These Mr. Duthie kindly brought down with him to Saharanpur and sent on to Kew, where they arrived safely.

Skardo and see about the baggage. He wrote that it had not arrived, and that he could get no answer to his telegrams about it.* I replied to him to keep on telegraphing, and wrote to the Gilgit Agency saying that it was now too late for the things to be of any use to me in Baltistan, and asking for them to be sent to Srinagar. This letter appears never to have been delivered. We were beyond reach of news from July 31st till September 10th, when we reached Skardo. There were no answers to our letters or telegrams, and no news about the baggage. I again telegraphed twice, and wrote three letters to Gilgit friends. The second telegram was carried from Gilgit to Dr. Robertson, who was at Baltit. He at once gave orders to have the things sent off, and they went over the Burzil and Tragbal passes to Bandipur, where they stuck. Of this I knew nothing. I reached Srinagar on October 11th. The baggage was not there, nor was there a word of information about it.

Colonel Durand had just left Srinagar for Gilgit. I wrote to him, therefore, and received his answer by swiftest return to the effect that the things were sent off six weeks before. They were ultimately found at Bandipur in a ruinous condition, having been broken into and pillaged. All the things (beetles, negatives, and other small objects) that had been packed in tins were stolen for the sake of the boxes; stolen also were such objects as a few pieces of Hunza embroidery, which the natives could retain without fear of discovery. Roberts, with great foresight, had taken out of the kiltas and sent by parcel post McCormick's sketches and the musical instruments bought in Nagyr. These reached me safely in Bombay.

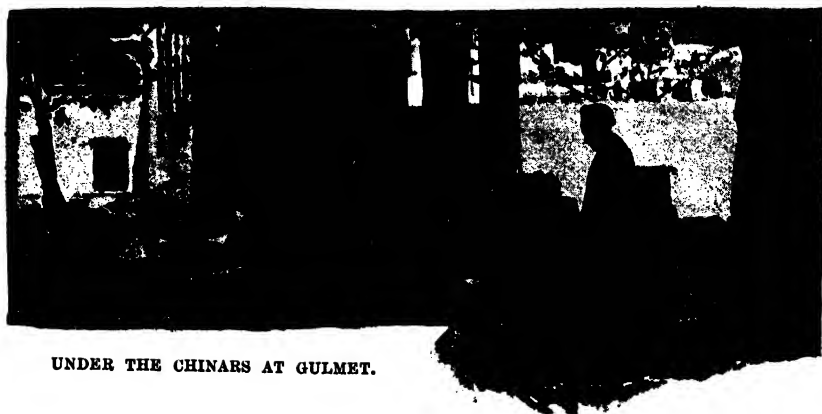
I naturally thought, and probably said, that I had been badly treated. But there was another side to the story.

* The telegraph wire between Skardo and Gilgit was often not in working order. The telegraph Babu nevertheless accepted telegrams, and said nothing about the interruption of communications. We were ignorant of this state of things.

I was wrong in supposing that there was any guarantee that the things would be sent ; this, of course, is a mere formal matter ; there is a comity on such occasions which overrides all guarantees, formal or informal. Only one of my letters or telegrams reached Gilgit, and to that a reply was sent, and thereupon action was taken. But the real reason for all the miscarriage was the fact that the Gilgit road was, during the summer, the scene of an immense and pressing undertaking. The whole victualling of the Gilgit garrison for a year, and the carriage of materials over it for the Bunji and other bridges, had to be completed during the few months that the Burzil pass was open. This employed every man's entire energies. The organisation was excellent for loads going in the Gilgit direction. But, though each squad of coolies returned daily unburdened to their morning start-point, transportation in that direction was worse than rowing against wind and tide. Had I been aware of all the engrossing preoccupations of my friends, I could have sent men from Skardo to bring the things away. But I was not aware, and every one was too busy to tell me. We were the victims of misfortune rather than of neglect, and have long ago wiped from our memories the temporary annoyance which our rather heavy losses not unnaturally caused. There remains to us only the pleasant reminiscence of kindnesses received and help rendered : this will not soon fade away.



PRISTI AND THE THIEF



UNDER THE CHINARS AT GULMET.

CHAPTER X.

GILGIT TO TASHOT.

June 8th.—All our four Gurkhas proved satisfactory in a high degree, but Lila Ram was unfortunately in poor health, and it was considered advisable to take another man in his stead. Bruce's choice fell upon Harkbir Thapa, a sepoy of his regiment, who earned distinction at Nilt and was rewarded with the Order of Merit. A better choice could not have been made. He attached himself particularly to me, and always walked with me, carrying the plane-table and photographic things. He was remarkably intelligent; he taught himself, by mere observation, how to set up, level, and orient the table, and the tricks of the various cameras. He was an admirable companion, and we soon became the best and most inseparable of friends. I can find no words too high to express my appreciation of him. He lacked Parbir's joyous spirits, but he possessed a fund of quiet good sense and excellent feeling, rare among men of any nationality. Like all Gurkhas he was perfectly brave, but he was likewise humane. He was the first to notice if a coolie was ill and to give him a helping hand or relieve

him of his burden. In snowy regions he would deprive me of my waterproof tent floor to make the coolies comfortable—a duty I learnt to leave to him. But they never imposed upon him by shamming. He did his duty and expected other men to do theirs.

Now that we were to march for a few days up a hot valley the sky, of course, cleared and the heat became intolerable. At eight o'clock McCormick, Roudebush, and Eckenstein, with Habiba, two Gurkhas, and twenty coolies, started off for Nagyr. Bruce and I were to ride after them later in the day

when my arrears of writing were finished. But he had premonitions of returning fever, and wisely decided to wait a day or two and fight it through. Rahim Ali, Salama, Shahbana, and the twenty-four loads of baggage were left behind.

I had a final cup of afternoon tea with Dr. Robertson at the Residency, and spent a delightful hour looking at the unique photographs he took amongst strange people and in previously unexplored regions, but such pleasures had to come to an end, and about half-past three I rode away alone on Roberts' pony.

The march to Nomal took me three hours and a quarter, riding leisurely. I retraced the track we had already twice traversed to the mouth of the Hunza gorge, wherein flows the energetic river that has cut through the main range



close by its highest point, Rakipushi. Up this gorge I turned; the desolation became more complete, and the scenery wilder than ever. There was no house, no bit of cultivation, not a blade of grass by the way. Yet the road was not deserted. I constantly passed travellers—now a Hunza man with his wife and babe, driving two goats, anon some laden villagers, then a party of coolies carrying up grain for the troops at Hunza.

There were fine sandy reaches for an occasional free gallop, but between them horrible stony tracts, or a narrow and rotten pathway skirting the face of some precipitous *parri*. The path was destroyed in many places by falls of the hillside. Once I missed the right track and got into difficulties, but on the whole preserved the even tenor of my way. From the lower part of the valley there is a fine view back to the fanged peak of Bungi, which, with its attendant summits, mimicks Nanga Parbat. Ahead there was also a fine snow dome (19,320 feet) supported by a series of serrated ridges, all picked out with new fallen snow. Presently the view opened further up the valley to the north, and through a narrow gorge there was a prospect to distant mountains of sharp and difficult outline. The slopes to right and left were all rocky and bare, but none of them led visibly up to the giants so near at hand. All the rocks were disintegrating rapidly and piling their bases with naked *débris*. Now and again there was a yellow or light green stratum crumbling more rapidly than the rest, and staining the lower slopes with bright streaks of colour, visible for miles. I was not sorry, when the last long *parri* was passed, to see the wide green fan of Nomal (5,340 feet) spreading before me. The pony recognised that he was approaching the close of his stage, and put all his heart into a final gallop over the broad, dry plain and the field paths beyond. At last we reached the camping-ground, and I found the tents pleasantly pitched in a shady place, close to a little canal of excellent water, whilst the blue smoke of a camp fire showed that cooking operations were in progress. A few

lagging coolies had even then not arrived, but they came in with the moonlight and gladly laid their burdens down after one of the longest and worst marches this country provides. Zurbriggen was down with a sun headache, but the others did not suffer. When the lights were out, we lay and watched the moon-cast leaf shadows dappling the roof of the tent, and the bright light streaming through the trees upon the ground.

June 9th.—This day we had a most disagreeable march, for which the magnificent scenery was, however, no wise to blame. Bare precipitous rock walls shut us in on either hand and formed constantly changing prospects of the sternest grandeur. But as soon as the sun looked over upon us the heat became terrible, and the pathway was the worst possible—always either over deep soft sand or loose stones. We went sinking and



NOMAL.

stumbling along in the shadeless wilderness so that fatigue and hunger came early upon us. Moreover the hour of our start, 6.15, was too late, and the heat of the day caught us before we had advanced many miles; finally disappointment was added to our other griefs, for we had been misinformed as to the length of the march. It occupied five and a half hours' hard walking, amid which we dispersed three and three-quarter hours of rest under the shadows of various rocks. The neighbouring high peaks are almost entirely hidden from the road. Bad as the track was, it had recently been much improved, and the worst *parris* were avoided by blasted and galleried

gangways of rough but skilful construction. The first glimpse of the green oasis of Chalt was a joy for all. We had still a considerable tract to traverse, but we advanced with renewed hope. At last we reached an old avalanche, whose unmelted part was still some two hundred yards wide at the base, where it approached within a few yards of the river—a remarkable fact considering the low elevation and the time of year. This avalanche drained a long steep nala descending (say a mile north of the Shai Char) from a fine craggy satellite of the peak 19,320 feet, a prominent feature in the view from Chalt fort. The fields of Chalt occupy the united fans at the mouths of the Chaprot and Tutu Unsor Gararasir valleys. Chalt is thus an important centre, for both the tributary nalas are fertile and support a considerable population. Here, moreover, the Hunza valley makes its great bend round the north-west foot of Rakipushi, and the grand angle about which it turns is immediately opposite the fort. The place itself is poor and scattered, blessed with but few trees, and dotted over with many deserted groups of houses and abandoned fields. Wherever cultivation is attended to, fine crops are raised, so that it is man, not Nature, that is at fault. Doubtless, under the new *régime*, with peace secured and extortion suppressed, a better state of things will gradually arise.

The camping-ground (6,340 feet) near the fort was dusty and shadeless, and the wind made it intolerable till the dust was laid with water. Still, when all was done, the place was unsatisfactory, and we were glad not to have long to spend there.

At dinner-time it was amusing to watch Pristi's behaviour to a village dog. Pristi gave a warning bark to make him understand that the remnants of our feast were not for him. The stranger contented himself with lying down and watching. Presently, when Pristi was fully occupied with a bone, he crept forward and secured a morsel unperceived, but attempting to repeat the process he was pounced upon

with much uproar. He thereupon rolled over on his back in an apologetic manner, and was contemptuously forgiven. The same tactics were repeated two or three times till all the bones had been consumed. Ultimately we threw the stranger a bone, but, seeing a missile hurtling through the air towards him, he concluded that it was coming with hostile intent and beat a hasty retreat.

June 10th. — We started away at 6 a.m. To reach Aylmer's bridge over the river we had to descend several hundred feet down the Chalt fan, and then to go round the remarkable isolated rock-mass that rises in the midst of the valley. We reached the bridge in thirty-five minutes from camp, and crossed the level maidan beyond it in twenty minutes to the foot of a steep slope. Here one of the westernmost ribs of the western extension of Rakipushi thrusts itself northwards to the river's brink. A way was, at the time, being cut round the obstruction, but, pending its completion, it was necessary to follow the old track, and to surmount the ridge by a col some 1,100 feet above the level of the stream. The ascent to this col took half an hour, and we were well rewarded for the *détour* by the glorious view and shady resting-places on the top.

Eastwards we looked straight up the Hunza valley, and had on our right hand a fine glimpse of Rakipushi's sweeping ice-slopes and chiselled top. Westwards we faced a ridge of nameless and not difficult nor very lofty peaks, which encircle the head of the Chaprot valley and its branches and neighbours. After a long halt we raced in ten minutes down the *débris* slope to the bed of the level valley. Harkbir, who carried my plane-table and stayed with me all day, was full of accounts of the Hunza campaign, in which he greatly distinguished himself. He had something to tell, in his modest fashion, about every turn of the road.

We descended into the depths of a precipitous nala, mounted the narrow track up its opposite vertical wall, and approached the cultivated fan of Nilt. This is terminated

on the far side by another deep, straight-sided nala, and by a precipice towards the river. The farthest angle of the fan is small, as the river-front there runs up to the foot of the hill, and in this confined space the fort of Nilt is planted, so that every one going up the valley must pass close under its walls. From a distance you can see the fort; but, as you approach, it becomes hidden behind a protruding angle of the hill, and when you round the angle, and come face to face with the thing itself, you are only some 200 yards from its gate. It was here that Colonel Durand received his wound.

We were taken over the position and into and around the fort, which was stormed and captured on December 2, 1891.* Its walls are of stone, 8 feet or more thick. Within them is a maze of little huts, thickly populated, when we passed through, with women and children. Behind the fort is a nala, similar to those we had passed; the far side of it looks down upon the fort. When our troops captured the fort the enemy retreated to this strong position beyond the nala, which they had previously fortified with sangars. Moreover, they turned water over the rocks, and thus coated them with ice, so that the second line of defence was even stronger than the first. Ultimately, on December 20th, the position was turned by a party led by Captain Manners Smith, and of which Harkbir was one. They ascended some distance up the nala, climbed a difficult wall of rock by a stone shoot on its east bank, and so attained the ridge beyond. They cleared out the sangars at the top of the shoot, and then, descending the ridge northwards, they took the main lot of sangars in the rear. This plucky action decided the campaign.

Fortunately we had not to follow Manners Smith's route, but, passing through the fort, went down into the nala by a good path, and reascended the opposite side. Here we saw the ruined sangars, and the bullet marks on

* A full account of this gallant campaign, written by a combatant, is given by Mr. E. F. Knight in "Where Three Empires Meet."

the rocks. "My rifle made those," said Harkbir, pointing to two blue patches on a hard sunburnt boulder. A little further we came upon the graves of natives who were killed, and there we left the last traces of war behind. We traversed another large fan, and came to another fort backed against another nala, just like the Nilt fort, only far less difficult of approach from the west. We crossed this nala and entered upon a desert tract, but hopefully, for there was the green fan of Gulmet (6,410 feet) not far ahead, and we were promised I know not how luxurious a camping-ground under its shady trees. At 1.15 p.m. the promised paradise was reached after three hours' walking from the col on the ridge.

The place was pretty enough to look at—a field of grass and clover thickly studded with iris and shaded by mulberry trees. Near at hand were little mosques, prayer-platforms, and ziarats. But there was a plague of



GULMET BAGH.

flies in possession, and they made the afternoon hideous, notwithstanding the pleasant shade of the trees and the white clouds that, at an early hour, blotted out the sun.

The Hunza valley thus far divides itself naturally into two parts of totally distinct character. From Gilgit to Chalt the Hunza stream has cut its gorge almost at right angles to the strike of the strata. The valley is therefore narrow with barren floor and precipitous sides. Above Chalt the Hunza valley runs parallel to the strata; it has open sloping flanks and a broad floor deeply encumbered with *débris*, and accommodating numerous fertile fans. Above Nilt they succeed one another on the south or Nagyr side at such brief intervals that the desert patches may

almost be neglected, and with a little more skill in irrigation they might be wholly blotted out.

Here and there the river makes a bend to the south, and cuts through a vertical stratum of rock. One such place is a short distance below Gulmet. The stratum cut through being a thick wall, apparently of quartz, the river has to be content with a narrow gate. The side-posts of this gate are utilised as points of suspension for a rope-bridge, which looks wonderfully frail as one gazes down on it from the distant fields.

We spent a quietly busy afternoon in camp. As twilight came on the *muezzin* called to prayer, and a horn was blown to carry the message far afield. The people flocked into the mosque, and filled it and the neighbouring platforms. McCormick, returning from this assembly, passed the group of Gurkhas, seated under a tree around the remnants of their meal. "Well, Parbir," said he, "have you done your prayers?" "Oh, yes!" he replied, "me pray—*chapatti*," making with his hands the motion as if flattening out dampers. Soon afterwards night came on with a heavy dew, and we retreated into our tents and sleeping-bags to a long and well-earned slumber.

June 11th.—In an interval of a morning of writing and other work I paid a visit to the village forum, under the chinara trees. It is most picturesque. About it are gathered the mosque, a number of platforms for prayer, with water-cisterns under most of them, and several fakirs' graves surrounded by stepped, crude-brick walls, like Assyrian battlements. One of the graves was decorated with a new patchwork flag, like those captured in Nilt fort, and which now adorn the mess at Gilgit. The trunk of one of the old chinars is covered with various incised outlines representing hands and feet. "The hands of Iskander," said my native cicerone.

The mosque is more architectural than any building we had seen since leaving Srinagar. It is about square on plan, elevated on a platform, and with an open arcade on

three sides. It is built of beams, laid horizontally, alternating with layers of pebbles imbedded in mud. Its roof is formed of beams laid side by side, but there is a kind of dwarf dome or recessed star in the centre, formed by placing beams in different layers, anglewise over one another. We entered the mosque by a log with notches cut in it for steps. There was no *mihrab* in the place, its west side (like those on the south and east) opening to the view. There was, however, a divan on the west side to serve for pulpit. The window heads were originally filled with a couple of planks roughly cut out into the form of a multicusped arch, but most of these have fallen from their places. The log columns carry bracket-capitals, of the form usual in wood construction, but with a curved outline below, roughly but not undecoratively cut. There were no bases. On the north side of the mosque are a couple of extensions, one being a chamber and the other a sort of veranda, probably used as a school. They told me the chamber was a *ziarat*, but there is no kind of tomb in it, and it is entirely bare, though there is a small *mihrab* in its west wall. I asked the name of the mosque. "The mosque of Iskander," my friend replied. He then opened the Koran and showed it to me—a common block-printed copy with woodcut borders, for all the world like the borders of one of Simon Vostre's or Thielman Kerver's French "*Horæ*" of the fifteenth century. There was also another book which I asked to see. I thought the man showed it with some reluctance. It contained a miscellaneous collection of things written and printed, and many loose leaves. There were a quantity of unfilled-in English army medical forms for returns of sick and wounded. They were scribbled over with charms, magic squares, and the like—intended for sale by the imam, I suppose, to the zemindars. I purchased one of them as a memento.

In the afternoon Zurbriggen and I went for a stroll up the valley path. We were followed by two Gulmet walas and a man on his way to Pisan. All the villagers we met greeted us in the friendliest fashion. We walked as far as

the opening of the next valley to the south, and enjoyed a noble view of the wide icefall that fills it, somewhat after the fashion of the Bies glacier above Randa, though on a threefold scale. We asked our native companions the name

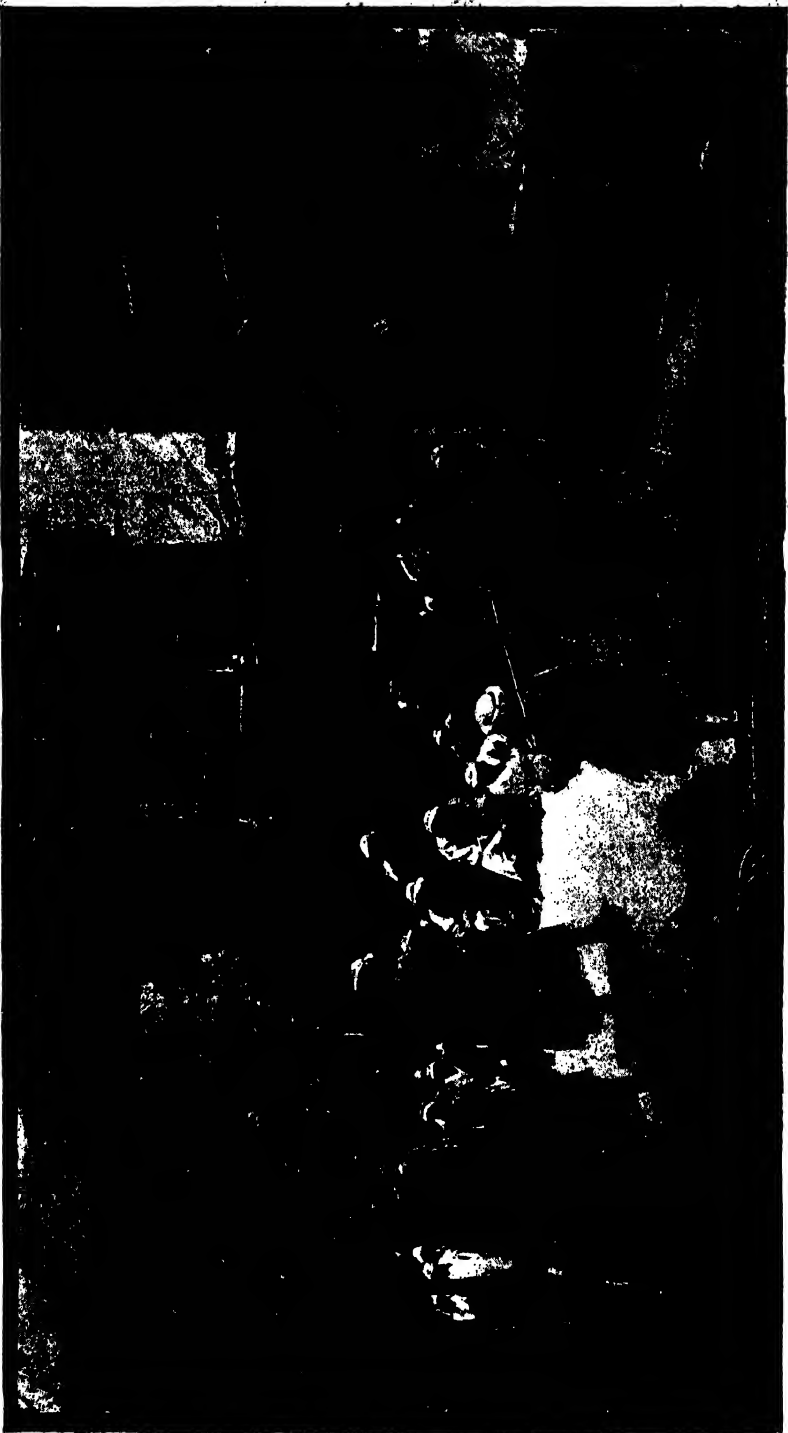
of the valley, and they said Domani Chish.

On our way back they kept telling me their names for this object and that, and asking the English name. They repeated my answers to one another twenty or thirty times. As we approached the trees of the village a wonderful effect appeared in the western sky, where peaks and clouds were mingled together in strange confusion, and the sunlight pierced the heavenly avenues with wild



CALL TO PRAYER AT GULMET.

streaks of light. Arrived in camp we found McCormick and Roudebush in a fatuous condition, throwing unripe apricots about for lack of better occupation. To this state of things dinner put a favourable conclusion.



OUTSIDE GULNET GATE.

When it was over, and the pipe of digestion smoked, we wandered out to the neighbourhood of the mosque, and saw the *muezzin* standing within, and nearly cracking his throat as he called to prayer. Two men came forward and drew rams' horns out of a niche contrived for them in the wall. Upon these they blew in unison three notes twice repeated. Then one came forward with an oil lamp and placed it on the fakir's tomb that bears the flag. He knelt down behind it on a platform and began his prayers. The villagers meanwhile assembled in no great number. They did not enter the mosque, but visited the platforms over the cisterns, said a brief prayer or two, and so went their ways. The women and girls came to the cisterns with their gourds, and, after drawing water, hurried back to their homes.

In the progress of our stroll we passed the gateway of the fort or rather of the walled village, for all the houses are gathered within it. The gate is situated in an angle of the wall, and is flanked by rough stone benches, whereon the elders of the place were seated, discussing the events of the day and watching their fellows and the tired cattle returning from the fields; for at night every living thing appears to be gathered within the fort—a fair commentary on the former condition of things in these parts. All the men rose as we approached, and received us with smiles. The light was fading from the hills, and a dark mass of clouds hung heavy in the west. The bare sweep of the Hunza slope of the valley put on, in the twilight, a majesty and greatness such as in the daytime it cannot wear. We gazed long upon it before slowly retracing our steps, and retiring into our tents for the night.

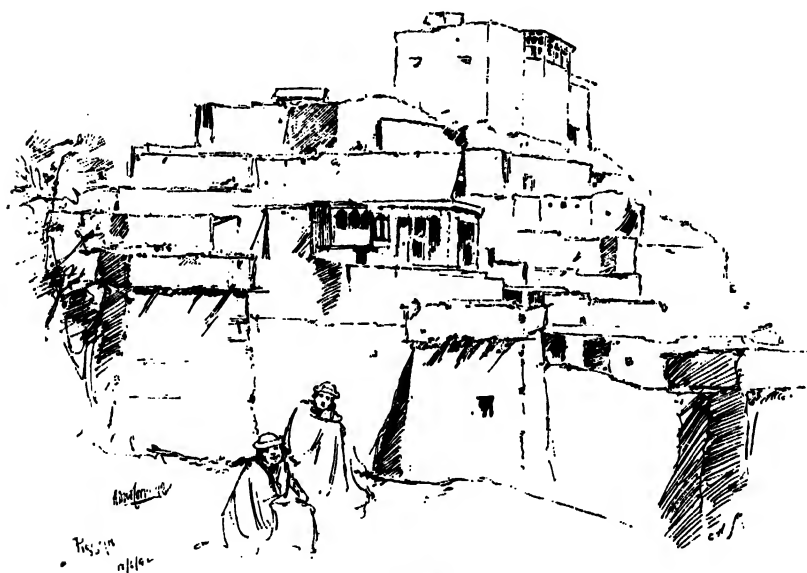
June 12th.—We started from Gulmet at 6.15 with a set of admirable coolies, who showed us a clean set of heels, much to our satisfaction. The coolie method here is different from that in the lower valleys, for the men only carry from their own village to the next. This day we had three lots of coolies, but the changes were so rapidly accomplished that there was no waiting, and we had no

trouble whatever, nor indeed were present at the change. We merely encountered from time to time a smiling and intelligent body of men waiting to be paid. They appeared to understand the value of money, and did not hold the coins in their hands with a doubtful expression of countenance as though wondering what in the world such stuff might be good for. As a consequence of this more intelligent attitude of mind, a little bakshish had an admirable effect. We were delighted with these men of Nagyr; they were far and away the best in all senses that we encountered in Kashmir—bright, cheerful fellows, and apparently friendly. They seemed to take an intelligent interest in all we did, and even a plane-table, as will be seen, was not an incomprehensible mystery to them.

This day I recommenced the plane-table survey, whilst Eckenstein paced and recorded the distances traversed. We built a big stone-man at the starting-point, and some Gulmet men seeing us thus employed brought stones along in their hands to add to the pile. The result was a famous monument, which the Gurkhas finally decorated with a bunch of fresh green. Its situation is close to the path on the left bank of the nala that drains the Gulmet glacier. After crossing the nala we continued to traverse a cultivated fan, then passed for half a mile across a steep and barren slope with a fine gorge on our left hand and big cliffs on the right. We thus reached the next fertile patch, beautifully situated between old moraines and the hillside. I ascended to the crest of the old moraine for survey purposes, and should have enjoyed a superb prospect of Rakipushi had not the clouds concealed his slopes; as it was we did have a fine glimpse of him up the Gulmet glacier valley and again up the Pisan valley, but his peak was never clear.

Pisan is a pretty village, walled and fortified about, of course, but with picturesque terraced fields and a prominently placed four-square ziarat, on the outside of which simple geometrical patterns in bright colours were painted for ornament. We could not fail to notice on all hands

evidences of agricultural activity and prosperity. The paths are good, the fields trim; there are patches of land laboriously and recently brought into cultivation; there are plenty of young trees carefully planted and tended. The aqueducts are well kept in order, and new ones abound. Beside the path are frequent cisterns for the glacier water to settle and clear itself in; and there is almost always a wooden cup on a stick for dipping up the water. The strong positions and fortified state of the villages, making the ordinary native raiding impossible, and thus securing life



PISAN.

and property, are doubtless answerable for this state of things, but it is highly creditable to the capacity of the natives for organisation. Undoubtedly much could be done with these men.

A pleasant walk through the fields of Pisan brought us to a strongly built native bridge, which crosses the considerable glacier torrent of Minappon. Though the peaks above were clouded, we yet had sufficient glimpses of them to perceive that they encircle a glacier basin of much importance. We gathered that the highest crest rises somewhat

precipitously from the nevé. The glacier, though diversified with icefalls, is quite practicable. It has retreated considerably, like its neighbours, but all of them may now be advancing.

The village of Minappon resembles its neighbours, and calls for no special remark. Its fields are extended by skilful irrigation to nearly a mile in width. Beyond them the path, after crossing a steep nala, traverses another desert tract. It passes below an old watch-tower, an outpost of the high-placed village of Miachar, and then descends by a kind of stairway to the stony maidan along the side of the Hunza river (6,580 feet). This was the most fatiguing part of our march, and lasted for over a mile. It brought us to a wild region where a nala, descending from the south, joined the main valley in the centre of a great bend. Here the ancient Nagyr glacier was for a long time kept back by a jutting ridge from the north. Vast moraines were deposited, behind this point, over square miles of country. The river has now cut a deep gorge for itself, and the cliffs that overhang it on the Hunza side are of surprising dimensions and steepness—utterly bare of any fragment of vegetation. Looking off to our left we could see, up the gorge, the new bridge over which went the road to Hunza. It was swept away by a flood a few weeks later. Our route led across the side nala and up its east bank, the ascent being made by steep zigzags, well laid out. It brought us to the village of Tashot (6,980 feet), in the public place of which our tents were already being pitched under a fly-infested, but otherwise pleasant, cluster of trees.

I was looking forward to a quiet afternoon of surveying and writing, and had taken refuge in my tent from the flies to get forward with my work, when I was hastily summoned to meet the great men of Nagyr who were come down to see us. There was Secunder Khan of the Raja family of Nagyr, whose photograph I saw at Gilgit, and his son and a Wazir and a lot of followers; with them were, of course, a crowd of villagers from the surrounding country, come to

see the show. Secunder Khan is a young man of easy manners and bright expression of countenance. He and the Wazir appear to be intelligent, and we found them interesting and interested. After greetings had been exchanged we caused the red carpet to be spread under the trees, for the best glory we could produce, and seats to be



LOOKING DOWN THE HUNZA VALLEY FROM TASHOT.

arranged about it. We discussed their recent visit to India, praised their country and people (they said they were cattle, but good cattle), asked about the shooting in their parts, and tried to get information about the pass to Askole. They all said they knew nothing of the existence of any such pass, and had never been further than Hispar. They asked to see our guns, and the Raja showed us a double-

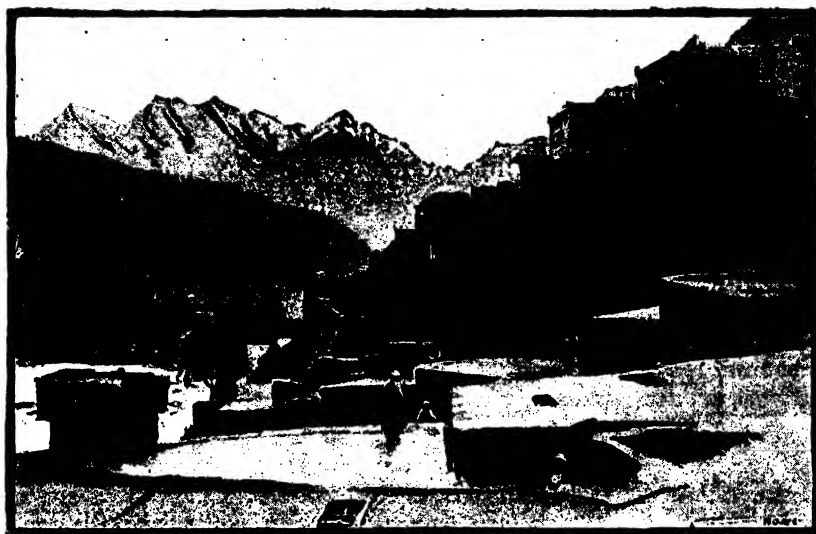
barrelled express rifle that had been given him at Calcutta, and with which he was going shikaring. Then we showed them our climbing apparatus—ice-axes, claws, and the like. A stylographic pen interested them; they at once grasped its structure and working, and Secunder told me how in Calcutta he had seen a machine with which you could write by playing with the fingers—a type-writer in fact. They said that India was very hot, and that they drank ice-water there all day long. They cannot stand great heat. Musicians came upon the ground, and the usual drum and pipe performance began. Presently the Wazir danced, and then others followed his example, but without the childish *verve* of the Gurais and Astor folk. This performance continued for about half an hour, and then I terminated the interview.

Zurbruggen and I wended our way up the steep cleft that leads direct to Fakkar. We were, of course, accompanied by some interested natives, who insisted upon carrying the instruments for us. When we emerged (7,480 feet) on the hilly region above, we were astonished at the size of the moraine-covered area, now almost wholly brought under cultivation. The crests, of course, are barren, for they cannot be irrigated. We clambered up one of the highest of these. The ridge was protected every two or three hundred yards by little stone forts, and it was crowned with a larger one, built in three steps like an old three-decker pulpit. Certainly these natives are adepts at fortification. I set up the plane-table on the flat roof of the fort—an admirable situation. Many natives assembled to watch my doings, and they almost immediately grasped the idea of what was going on. The man who carried the plane-table case put back the various parts in their proper places, taking care to turn the glass face of the compass inwards for protection. They answered all my questions intelligently, but they took no interest whatever in the snow mountains. The grand row of Hunza peaks were to them so many “Hunza walas,” and there was not a name to be gathered for any one of them. These

peaks were partially enveloped in clouds, but they showed their glorious summits from time to time. Not so Rakipushi and his comrades; they drew their mantles about them and obstinately hid themselves. Down the valley a storm was brewing, so as soon as our work was done we hastened to retrace our steps, and returned to camp and a long evening of work.



COOLIE AS S. GIOVANNI (p. 208).



LOOKING WEST OVER NAGYR FROM THE ROOFTOPS.

CHAPTER XI.

TASHOT TO NAGYR.

June 13th.—We left the Tashot camping-ground (6,980 feet) at six o'clock, with twenty-two coolies; and at once proceeded to retrace our steps of the previous afternoon, mounting the slope of *débris* dust and the gully above it, and traversing the meadows on the large moraine area, to the fort and village of Fakkar. The paths through this cultivated area, and all the others like it in the upper part of the valley, are very good. Often they follow the gentle gradients of irrigation channels. Generally they are shut in on either hand by well-built breast-high walls of undressed stones, cleared from the adjoining fields. Fakkar is a picturesque village which has overflowed its walls. The gate is a prominent object, and opens on to the long, narrow polo-ground, as is customary in these parts. Opposite the gate is a wooden mosque, like that

at Gulmet, only more ornate and decoratively dilapidated. All about the large cultivated area that surrounds this village there are cottages built of stone and mud, single or in groups, and mostly shaded by mulberry or walnut trees. The landscape thus acquires a rich and civilised appearance, grateful to an eye wearied with barren rocks and sandy valley-bottoms. We carried the plane-table to the cemetery, which occupies the crown of a hill, useless for purposes of cultivation. A startling view revealed itself suddenly before us. The high area upon which we stood ceased at our feet, and a slope, that was in places a precipice, dropped away to the river gorge some 1,500 feet below. The gorge could be traced, winding its sinuous way up the valley. An abrupt mountain rose on the right, whilst afar off were cloud-given glimpses of the needle points of rock and blades of snow that rise behind Baltit to heights of some 23,000 feet. Reluctantly turning our backs on this great prospect—lo! the white wonder of Rakipushi flashing the sunshine through a veil of mist!

We had to descend steep zigzags and to cross a wide slope of dust and fine *débris*, formed by the unusually complete disintegration of the rocks above. It would appear that the burning heat of the sun is as powerful an agent in breaking up rocks as any other, alternating, as it does, with frost and occasional rain. In no part of the Alps is there anything like the amount of rock ruin, even in proportion to the size of the mountains, that one finds in these dry districts of the Karakoram. Beyond the barren slope we reached the fields of Shaiyar (7,370 feet), which occupy a shelf between the edge of the river gorge and the foot of a rock precipice. I had fixed the north angle of the fortified enclosure as my next plane-table station, and fortunately found an open postern at that point. We crawled in through it and entered the deserted village, for all the folk were awaiting our arrival at the gate. We climbed a log-ladder to the roof of one house, and thence to that of another, which occupied the chosen angle. I seized the

chance to investigate the domestic architecture of Nagyr. The whole place is built of undressed stones and pebbles imbedded in mud. Crude bricks are rarely employed. The roofs are flat and formed of thin branches, laid across beams and covered with mud. Most houses seem to consist of but a single room, shaped as the site may dictate. The front door is as often as not a square hole in the roof! A few of the best houses have an open chamber or gallery, built of dressed wood and with some attempt at picturesque effect.

It was not long before the natives found us out. When our work was finished they suggested that the best way out was back by the postern, but I preferred to walk right through the place, and they accordingly led me on. The main street is never more than a yard wide, and neither straight nor level for two consecutive yards. It goes up steps and down slides. It is here and there roofed over by houses built across it. Small public latrines stand beside it. I gathered that there are no sanitary inspectors. Just within the gate the street opens out somewhat, and there is a small public divan. Outside are stone benches, a polo-ground of the usual long, narrow form, and a dilapidated wooden mosque, built, like the village, on *roches moutonnées*.

From Shaiyar it is a mile to Askordas (7,310 feet), and a short distance beyond comes a mass of old moraine. All this part of the way lies through fields, and is a charming walk. The path is never straight; it meanders about as the configuration of levels and fields dictates. The foreground of the view constantly changes, and is always picturesque. The edges of the fields on the slope side are supported by dry-stone walls, skilfully put together. There are plenteous trees. Water flows along tiny channels on all hands, and the fields are divided by low ridges into yard-square patches for the distribution of the irrigating flood. The crops, when we passed, were growing strongly and green. Wherever corn could not be cultivated, there were fine fields or slopes of fodder. Every now and again there was an undershot water-mill, of simple construction.

A stray cottage or two under a clump of mulberry trees and a fortified village every mile enlivened the way with interest and charm. About a mile beyond the moraine station we quitted the path and mounted to a more commanding position on the slope above, just at the edge of the deep Samaiyar nala, which we ascended a few days later. Various valleys radiated from this point. Near us was the junction of the Gujal and Nagyr valleys, and we could look up both of them. Across the river were the fields of Hunza itself, and the great mound of houses of Baltit,* the capital, with the oblong mass of the Thum's palace crowning the pile. But the superb feature of the view was the Boiohagurdoanas mountain, about the head of the short Ultar valley that debouches through a narrow gorge close behind Baltit. There were many clouds on the peaks, but enough was visible to give a good idea of the whole. The mountain is buttressed by sharp aiguilles, after the manner of Mont Blanc, but there is no snow dome above them. Every ridge is serrated and every face precipitous. One tooth, named Bubuli Mutin, is so remarkable that it has attracted the attention of every traveller who has passed this way. It is like the Pic Sans Nom between the Aiguille du Dru and the Aiguille Verte, only vastly larger. Though a heavy fall of snow had recently taken place, scarcely a speck clung on any of its visible flanks. In all this extraordinary cirque of mountains the snow descends in avalanches from stage to stage, and forms overhanging glaciers on the shelves. These finally drain into a single narrow cataract of ice, wedged in a deep gully, which one can only see into for a short distance. It is not till near the foot of this gully that the steepness of the slope

* The legend runs that a Thum of Hunza once wanted to marry the daughter of the Raja of Baltistan. The Raja sent an embassy to see Hunza, and they reported that the houses were badly built and the place was not fit for a Balti lady. So a number of Baltis were sent to Hunza to build the Thum's palace and lay out the town, which was called Baltit, after them. The tradition that the men of Samaiyar are of Balti descent appears to be connected with this story.

lessens and the Ultar glacier has leisure to form a black snout, which comes to an end about 1,000 feet above the town of Baltit.

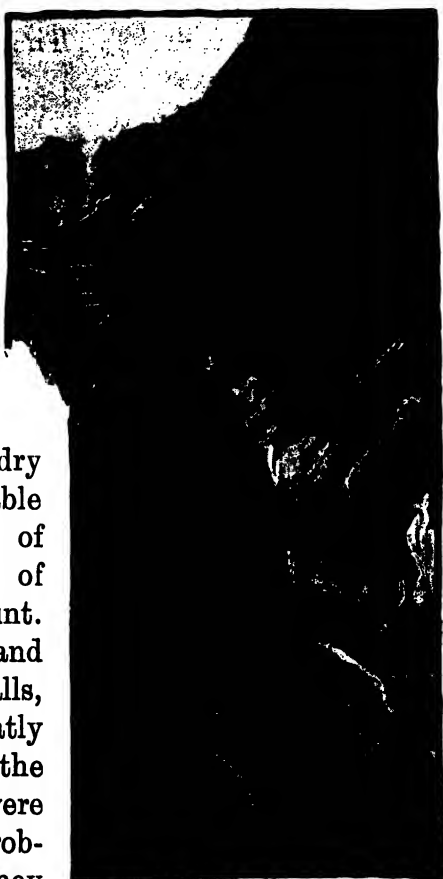
After crossing the Samaiyar stream, and mounting the



BUBULI MUTIN.

opposite bank of the nala, we walked through fields for another three-quarters of a mile and entered a desert area. On the opposite side of the deep-lying Nagyr river was the tongue of land separating it from the Gujal valley. The depressed extremity of this tongue is encumbered with

ancient moraines, deposited by the glaciers which came down the two valleys and united at this point. The united glacier halted for a long time at Fakkar, and left the great moraines there. When it retreated the valley between Samaiyar and Fakkar may for a time have been a lake basin till the Fakkar barrier was cut through by the Tashot gorge. The lake basin is now filled to a great depth by mud-avalanche *débris* on both sides of the alluvial gorge in which the Hunza river flows, and the large surface of the *débris*, largest on the Hunza side, forms the most considerable and the best cultivated fertile area we had seen since quitting the vale of Kashmir. The husbandry and irrigation are admirable and seem almost incapable of improvement. Every inch of space is turned to account. The fields are surrounded and supported by excellent walls, and even closed by neatly platted wattle gates. If the people of this valley were dreaded and successful robbers abroad, at home they were evidently capable of inventing and maintaining through a long series of centuries an efficient communal organisation.



THE GORGE BELOW NAGYR FROM THE
BURIAL-GROUND.

We reluctantly left the pleasant region behind, and plunged into the bare and desolate wilderness with which the Nagyr valley opens. Except for the view behind us,

there was little to delight the eye—bare rock-slopes on the one side and *débris* slides on the other—save at one point where a thousand-foot cliff, in places overhanging, rises immediately above the path. Tired and faint we watched the distance diminishing that separated us from the large oasis by Nagyr town. We had been nine hours marching and surveying without a morsel of food, and our senses were dulled. The moments passed like hours, and the heat was blistering. At last we trod on watered soil again, and the town was close at hand. It is built on the west end of the crest of an enormous ancient moraine, which marks a long halting-place of the united

Hopar and Hispar glaciers, after they had separated from the Gujal ice-stream. The Nagyr river flows in a deep gorge on the north side of the moraine, whilst south of it a high nar-



NAGYR POOL FROM THE POLO-GROUND

row valley is caught between the moraine and the hill-side. In this valley is the lake and polo-ground of Nagyr, which we presently came to know so well. The gate of the town is at the foot of the moraine beside the lake. The earth-built houses rise in irregular tiers, and the Thum's palace is on the top, overlooking all, just like the palace of Baltit, the situation of which, however, far surpasses that of the capital of the rival state.

A number of natives were gathered about the gate, awaiting our arrival. They greeted us cordially, and led us along the side of the town between the wall and the lake. "Are the tents near?" I asked. "Oh, no, they are not near."

"They are here!" The lake was pretty, but rank with weeds. I inwardly murmured "mosquitoes," and in due time they put in an appearance. At the end of the lake the old Wazir Nadlu and the relations of the crippled Thum were gathered to meet us. They conducted us to the tents, pitched beside the polo-ground (7,790 feet) on the platform whence the Thum watches the game. Not being in a mood for interviewing, I sent every one away till our hunger was satisfied; but at five o'clock the crowd returned, headed by Nadlu. He was an aged man, in appearance almost infinitely old. He was little better dressed than the ordinary zemindars, but he had excellent manners, and was treated by the others with an easy respect. I questioned them about routes out of the Hispar valley—old passes to Yarkand and Baltistan. Of the Yarkand route they acknowledged some dim traditions, but knew nothing definite about it. They knew nothing of the Hispar pass, but the Nushik La they had all heard of—the Arundo road, they called it. It was frequently crossed in former days, they said, and some of them had been over it, but of late years it had become impossible. They pretended never to have heard of Askole.

I sent them away after an hour's talk, and the promise of much bakshish to the coolies who should accompany me to Baltistan; we then settled down to a second dinner. "What kind of Mussulmans," I asked Habiba, "are the people here?" "They are Shiahhs." "And what are the Hunzas?" "They are Maulais.* I am Sunni. The Nagyr folk are a low lot. Only think! they will drink out of your glass, but not out of mine! They don't send me proper rations, because they are Shiahhs. They are low folk, beasts!"

After sunset we wandered up the polo-ground, and watched the cold western light coming over the distant ridges and cutting out the poplars and chinars in black silhouette. It was a still and beautiful evening, but the roof of the sky was

* See Biddulph's "Tribes of the Hindu Kush," p. 119. |

heavy with cloud, and the weather in all respects contrary to our needs. As we returned to camp and considered in how glorious a place we were, we could not find it in our hearts to complain because some days might elapse before it would be possible to start on the more adventurous stage of our journey.

June 14th, 15th.—Two busy and pleasant days were spent at Nagyr. Most of the time was devoted to talking with the natives and cross-examining them on various matters. I set down the information they gave me without comment. It is in some points at variance with statements in Biddulph's "Tribes of the Hindu Kush," and the probability of correctness is on Biddulph's side. I picked up but little of the local language, and had to communicate with the people for the most part through the medium of an interpreter. I used to sit for hours on a camp stool at the door of my tent under the shady chinar trees, surrounded by a picturesque group of villagers, all intently watching me. At first they would stand about respectfully. By degrees abandoning their shyness they would come nearer and squat on the ground in all manner of easy attitudes, grouping themselves together into the most delightful compositions. The Thum's Munshi, who was specially attached to us, was always to the fore; and he and one or other of the Wazirs did most of the talking, only now and again appealing to the crowd for some fact or for confirmation of their story. The Munshi generally knelt in the attitude of the Scribe of Gizeh, to whom he in other respects bore a considerable resemblance. He had the same humble way with him, and the same mild and expectant countenance. The boys and youths of the Thum's family meanwhile pervaded the camp. Each of them had his particular following of ragamuffins, and kept his court with them. They were inquisitive to the last degree, and were always asking for this and that to be given to them.

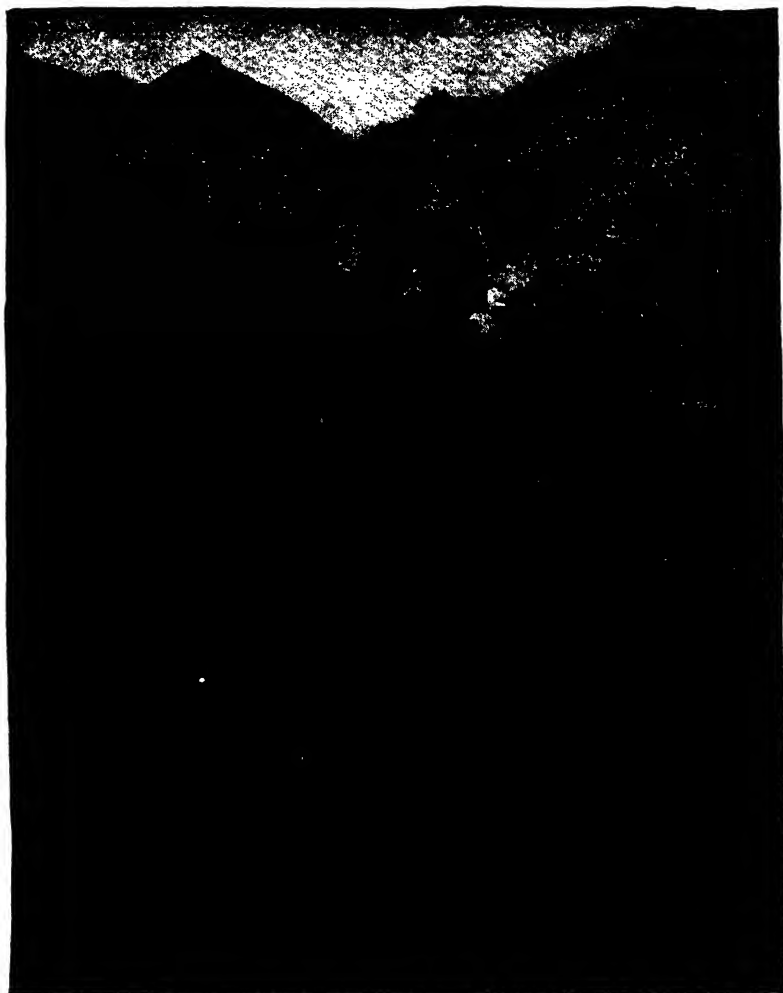
They called their language (*bash*) Yeshkun, and did not know of it as Burishki. I made them tell me a number of

common words,* likely to be useful, but found most of them afterwards, when I got down to India, in Biddulph. I also learned from them the names and relationships of all the members of the Thum's family, but they would not be likely to interest the reader, and all these facts are duly recorded elsewhere. They told me that the people of Nagyr, the Nagyri, are about half and half Yeshkun and Shina, whilst the Hunza folk (Hunzakuts, they called them) are chiefly Yeshkun, with but few Shinas amongst them. They said their castes, in Nagyr, were five—the Raja folk, the Yeshkuns, Shinas, Berichu (or Dom), and Shoti. The Berichu are pipers and drummers, the Shoti leather-workers; both being regarded as very low folk. There are no Shoti in Hunza. In their opinion the Shinas were in the country first, and the Yeshkuns came in upon them from Wakhan. The group of three villages called Samaiyar is inhabited by people of the Balti race, immigrants who came over the mountains long ago; they now talk only Yeshkun like the rest. The Raja families of Hunza, Nagyr, Gilgit, and Baltistan are all allied and of the same heavenly race. They are descended, so they said, from one Iskander (Alexander the Great), who was a great Raja of Iran, but that was long ago—perhaps five hundred years ago. Who can remember so far back as that and be certain? The winters at Nagyr are cold, very cold. All the people, who now were scattered over the alps, come into the town for winter, and then the place is full of men. The snow lies on the ground and about the houses for four months, but at Hunza it hardly lies at all, for Hunza is much warmer and gets more sun. We fell to discussing the various routes from Gujal to Yarkand, but that country does not come within

* They gave me the following, which are not included in Biddulph's vocabulary: Alp, *rung*. Avalanche, *shel*. Boots, *moussa*. Bread, *chapik*. Canal, *gotsil*. Cap, *parzin*. Chinar, *buch*. Cloud, *haralt*. Couloir, *harh*. Glacier, *gamu*. Grey, *guro*. Leaf, *tap*. Mist, *lish*. Mountains, *chish*. Poplar, *burpir*. Quickly, *tsor*. Rope-bridge, *gal*. Sheep, *karelo*. Shoes, *huchu*. Snow, *gye*. Tent (or house), *hah*. To-day, *kultu*. Villager, *giramkuts*.

the purview of the present volume. "Now," they said, "we are going down to get food" (*chamini amanum chapik chitram nichum*).

In the afternoon of the first day I went out for a stroll,



A NIGHT VISIT TO NAGYR CEMETERY.

and climbed the steep face of the moraine above the polo-ground, and so came out on the open space east of the town. It is riddled and burrowed into with graves of all ages. The ends, sides, or roofs of many of them are fallen

in, and bones protruded constantly. I noted down two such open graves in what seemed to be the oldest part of the burial-ground; there were skulls in them. Two of these skulls arrived safely in England, and are now in the museum at Cambridge.

The view from the burial-ground is striking. Precipitous slopes, cut out into earth-pyramids and blades, lead down to the river below. A rocky mountain, bare of vegetation and broken into precipices, rises on the opposite side to the crest far overhead. Turning one's back on the quaintly straggling houses of the town, the polo-ground and lake are below on one's right, and a broad green hill-slope rises beyond them. But for us all the interest lay ahead, where the valleys divide towards the unknown complex of mountains whose recesses we were going so soon to penetrate. One great peak stood out prominently amongst them. The natives called it Ghenish Chish, or the Golden Parri. We looked along the strike of the strata towards it, and saw the vertically tilted layers of rock cutting straight into it like steel blades, whilst their continuation behind us towards the west cut similarly into the Budlas peaks.

We wandered down to the polo-ground valley, and along it eastwards for a mile or so, passing through fertile fields and by a succession of prosperous-looking villages. Narrow canals, full of babbling water, were always near at hand, cleverly contrived about the uneven ground, sometimes curving round humps of earth, sometimes carried on well-built embankments across some irregular valley or depression. We came out at the village of Birkat, which stands on the edge of the moraine and overlooks the deep hollow where once the Hispar and Hopar glaciers joined. The view was already familiar to me from an excellent photograph taken by Colonel Durand.* A more unusual

* An engraving of this photograph was published in the *Geographical Journal* for February, 1893 (p. 133), where it was misnamed "Foot of the Hispar Glacier." It shows the Hispar valley on the left, the Hopar valley, glacier, and Golden Parri on the right, and the end of the Rash ridge between the two. The great ruined moraines are seen in the middle distance,

prospect it would be difficult to imagine. It was not the bare mountains and valleys behind that attracted our attention, but the beds of the retreated glaciers at our feet and the vast ruined moraines they have left behind them. These stand up so bare and steep, with faces such as the ice might only the other day have shrunk away from. Whenever the glaciers began to retire they must have shrunk with continuous rapidity, for these are no minor moraines



THE JUNCTION OF THE HISPAR AND HOPAR VALLEYS.

(Drawn from a photograph by Colonel A. G. Durand)

such as would be formed at stages of arrested shrinking. When we reached Hopar we found this judgment confirmed.

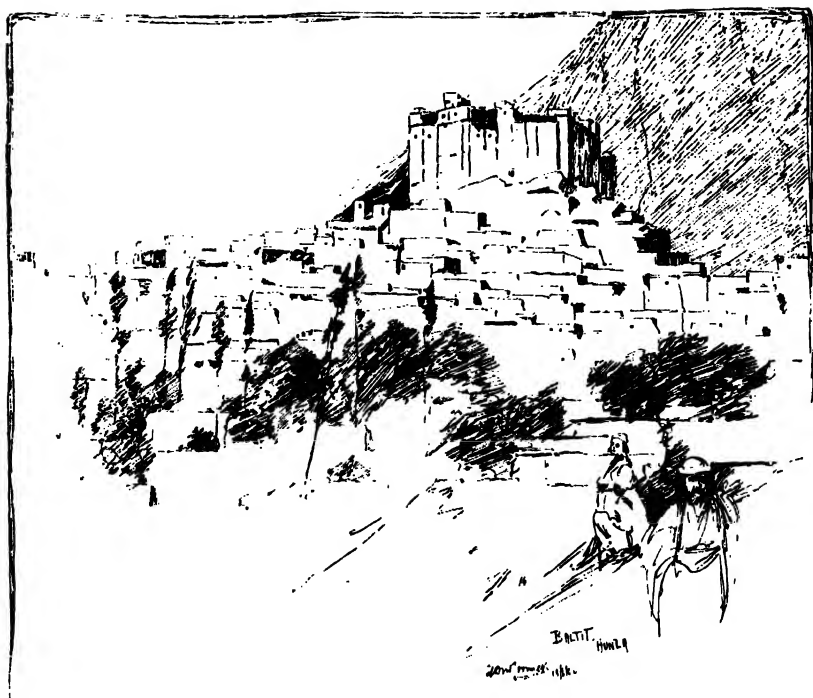
The following morning (15th) was again dull, with clouds upon the peaks. I wandered forth, with McCormick, Roubush, and the plane-table, to the shoulder of the ridge overlooking Samaiyar. We went by a path that leads through the village of Hamari and then up to Gortkushal. We lay about for some time on a pleasant alp, watching the clouds.

change and wave about the wondrous peaks of Boiohagurdoanas. In the afternoon we were again visited by the young Raja folk, a pestilent crew, who came begging for old boots, revolvers, and everything they could see. The children had round faces, with pointed chins hung on below them, very Düreresque. The Thum's wife sent us eggs, red pepper, and roses—a curious group of presents. We responded with cakes of chocolate.

The weather being continually unpropitious we determined to visit Baltit, and, if better conditions arose, to attempt thence the ascent of Boiohagurdoanas, which offered a promising arête. The evening was accordingly devoted to packing and other needful arrangements. A deluge of rain fell during the night.



MUNSHI SHER AHMED.



BALTIT FROM CAMP.

CHAPTER XII.

NAGYR TO BALTIT AND SAMAIYAR.

June 16th.—When the rain ceased in the early morning we started away from Nagyr with a dozen coolies, leaving Parbir and Amar Sing to look after the rest of the baggage. Roudebush preferred to go round by way of Tashot and the wooden bridge. He accomplished his long walk in seven hours (he was far the best of us on the flat), and arrived at Baltit only three hours after us. We went down a steep path, and in half an hour reached the rope-bridge (7,090 feet), which communicates with the barren right bank of the Nagyr river. The bridge was taut and in good condition, but the water, rushing swiftly beneath, turned me so dizzy that I

hardly reached the other side. McCormick, the yachtsman, simply waltzed over. A very rough track now led, across slopes and gullies much swept by falling stones, to the united bands of ancient moraine which overlook the junction of the Gujal and Nagyr rivers. We reached the point of the peninsula in about an hour from the bridge. It commands an admirable view of the Hunza-Nagyr valley, and of numerous distant peaks and radiating nalas, but unfortunately the clouds were low on the hills, and no summits could be seen.

After a long halt we ran down a steep slope, and scrambled across some rocks to the second rope-bridge, which is carried over the broader and swifter Gujal river. It was a new bridge, but I hated the sight of it, after my recent experience, for it hangs high above the water, dips in a deep catenary, and is very long. Its supports are two cliffs. It had no cross-ties to keep the side-ropes apart, so that one had to push them asunder to force one's way along. I put on the rope, as for a snow-bridge, gave Zurbriggen one end of it, and so got over well enough. On the far side there was a little rock scramble down to a level place by the river-side, whence a path mounted up the face of the gorge's alluvial cliff and brought us almost immediately under the walls of Ganish. They are like the walls of Constantinople on a small scale, but with towers, relatively closer together, grouping picturesquely in the landscape. We passed round the village and came to a pond before the gate. It was shaded by willows and a fine chinar, and backed by a group of small wooden mosques and ziarats with much carved decoration, admirably effective. I passed through the gate and found, immediately within it, as usual in these villages, a portico of decorated wooden columns. The natives received us with pleasant salutations.

The path that leads up towards Baltit is bordered on either side by a wall of dry cyclopean masonry, the undressed component parts of which are very large and excellently fitted together. Where the slope steepens these

walls are placed further apart, and short zigzags are built up between them—a monumental piece of simple engineering. We walked slowly, for there was much to look at, the cultivation being everywhere admirable, and each step disclosing some new detail of beauty or interest. The whole of this side of the *débris*-filled floor of the valley, between the cliffs and the edge of the river's gorge, is covered with terraced fields. They are terraced because they must be flat in order that the irrigating water may lie on them. The downward edge of each terrace must be supported by a strong stone wall, and every one of these walls is of cyclopean work like those just described. The cultivated area of the oasis is some five square miles in extent. When it is remembered that the individual fields average often as many as twenty to an acre, it will be seen what a stupendous mass of work was involved in the building of these walls, and the collection of earth to fill them. The walls have every appearance of great antiquity, and alone suffice to prove the long existence in this remote valley of an organised and industrious community. People who have been thus educated by nature are assuredly capable of a higher development under the happier conditions, now introduced amongst them. Philanthropic persons might start a school in Hunza with every chance of good results.

To build these fields was the smaller part of the difficulties that husbandmen had to face in Hunza. The fields had also to be irrigated. For this purpose there was but one perennial supply of water—the torrent from the Ultar glacier. The snout of that glacier, as has been stated, lies deep in a rock-bound gorge, whose sides are, for a space, perpendicular cliffs. The torrent had to be tapped, and a canal, of sufficient volume to irrigate so large an area, had to be carried across the face of one of these precipices. The Alps contain 'no *Wasserleitung* which for volume and boldness of position can be compared to the Hunza canal. It is a wonderful work for such toolless people as the Hunzakuts.

to have accomplished, and it must have been done many centuries ago, and maintained ever since, for it is the life's blood of the valley. It excited Zurbriggen's warmest admiration.

Still more difficult for a semi-civilised people must have been the elaboration and enforcement of the laws regulating the distribution of the water over the land. They were a necessity of the situation, and the existence of the fields proves that such laws were evolved and maintained. Hunza must have been civilised by its canal as ancient Egypt was civilised by the Nile. A strong central power, wielded of course by a single hand, was the inevitable result. The Thums of Hunza were powerful despots, and the stories about bad Thums show them to have been dreadful tyrants. Internal order was, however, on the whole, maintained, for whoever held the head waters of the canal could instantly compel the submission of the folk. The country was therefore well cultivated, and population increased to the extreme limits which the land could support. The smallest shrinkage in the food

supply brought on famine, and then the only resource of the people was war for the sake of plunder. Hence the Hunzakuts were forced to become a robber tribe. Their very virtues compelled them to it. They occupied an impregnable valley which commanded all manner of passes. They could descend upon Gilgit; they had access to the Taghdumbash Pamir; they could get over the Shimshal and cut into the caravan route from India to Yarkand.



KARBIR.

The Nagyri, on the other hand, were more firmly enclosed by snowy ranges. The pinch of hunger had to be tight upon them before they were driven to face the perils of the Hispar or Nushik passes, or the still longer and more dangerous passages that may have admitted them into the Yarkand basin. Thus the Hunzakuts became more experienced warriors than the Nagyri, and still believe themselves to be superior to them.*

Now that the British Government is responsible for the well-being of these peoples, and that their raiding is put an end to, a problem has been created which it may not be easy to solve. The population of the valley will increase to starvation point, and some outlet will have to be found for the surplus folk. Our engineers are already helping the people to dig more canals, and so to irrigate new areas of desert, and make them fertile. If this process is carried forward, not only in Hunza-Nagyri, but in all the neighbouring valleys, a large population will ultimately fill this region, and the whole face of the country will be changed. New industries will arise; the mineral resources of the mountains will be developed; and who knows what will be the ultimate outcome?

Three-quarters of an hour above Ganish we met a Kashmiri sentry, and came upon a pleasant grassy slope, broken into level patches. It was the camping-ground (7,940 feet) of the English officers. We were kindly received by Captain L. Bradshaw and Lieut. J. McD. Baird. They were presently joined by Lieut. F. H. Taylor, who came in from Gupal. They entertained us with the utmost hospitality in the rough stone hut they caused to be built for their mess. We did not know at the time how little *à propos* was our coming. They shared their last pipes of tobacco with us, and their dwindling supplies of sugar, salt, jam, and things in tins, and never let us suspect the low ebb to which

* In the year 1893, when Bruce was stationed on duty in these parts, he organised some sports for the Hunzakuts and Nagyri. All the events were won by Hunza men.

their luxuries and even their necessities were reduced. It was only after we left that we accidentally came in possession of the facts. This kind of hospitality in remote regions is the sort of thing one remembers.

If there was little to eat in Hunza there was plenty to look at, and the view from the camping-ground was superb. Close behind us rose Baltit, piled on a moraine mound, with the castle on the top and the deep glacier nala behind it, leading up to giddy peaks. Before us opened the Samaiyar valley with its great glacier descending from the Bagrot pass that we vainly endeavoured to reach from the south a month before. The Crown of Dirran rose splendidly to the left of it, and formed the constant object of our praise. To our left we could look up the bare Gujal valley, and see it bending round and passing away into the wild regions of the north; whilst to our right the Hunza valley, with its fertile floor, led the eye to the mighty wall, which culminates in Rakipushi towering over all the land. The hours that I spent at Baltit were chiefly devoted to these wonderful prospects. They impressed themselves on the memory with indelible force.

June 17th and 18th.—These were two days of hopelessly bad weather. Rain fell from time to time. Clouds enveloped the mountains, and new snow spread itself deeply over them. There was nothing for a mountaineer to set his foot to. Now and then there were temporary and picturesque clearances, but they never lasted for more than a brief interval. I spent much of my time questioning the Wazir Humayon Beg, who came with the Raja Mohammad Nazim Khan to see us. He talked Persian, and Baird kindly acted as interpreter. We started on the castes and clans of the valley, how many they were, and what were their names.

“They are first Aiesho,” replied Humayon Beg, “that is the Raja family; next Tarao, that is the family of the Wazirs, my family; then come Gulwal and Melua. These four are only in Hunza. After them there are, in Gujal,

Budule at Gulmet, Hafizkator (*kator* means clan in the Wakhan language) at Gircha, Kulikator at Pasu and Gulken, and Burikator also at Gulmet. Most of the people are Yeshkuns, but there are Shinas, especially at Hini, opposite Gulmet in Nagyr. There are also Berichu as in Nagyr."

"Are not the Raja-folk of Nagyr also Aiesho?"

"No! they Moghloto, but Moghloto and Aiesho descended from the same father and mother, and so did the Raja families of Gilgit and Baltistan."



THE WAZIR OF HUNZA.

We then embarked on a genealogical discussion, and the Wazir rained forth names and generations, marriages and murders, till I became utterly at sea. The whole question of the genealogies of these Rajas has, however, been gone into by Biddulph, and need not be repeated here. Passing to the question of language, Humayon Beg affirmed that they called their tongue Yeshkun. "There were some later immigrants whose language was Tarmanum, and even now in Aliabad and Hyderabad there are about

twenty people who still speak Tarmanum. They came from Badakhshan and Wakhan. To this day the people of Gugal intermarry with Wakhan and Sarikol." Of course we discussed the question of passes at much length, but the country through which they lead is outside the range of the present work and its maps.

"What do you know about sorcerers in this valley?" I asked.

"There used to be sorcerers, but that was long ago. I



THE THUM OF HUNZA.

will tell you about one. You must know that Aiesho was the daughter of Maiuri Thum.* She had four sons—Bukha, Shah, Noni, and Lali, who governed different parts of Hunza. They had numbers of children, but all of them were murdered by Kisro Khan, who made himself Thum.

* Biddulph says she was daughter of Girkis, first Thum of Hunza, the son, with Moghlot, of Maivru Khan.

One woman, the wife of one of these descendants, alone escaped. She was the wife of Dashman Khorduk, who was my ancestor. She was pregnant. She escaped across the river to Samaiyar, and the Samaiyar people took care of her and gave her food. Her child was born in Samaiyar. After the massacre the valley became barren. Seeds brought forth no fruit for three years. Now a sorceress named Shungukor, a Hunza woman, exercised her spells over Kisro. Colonel Durand knows that there were sorceresses in Bagrot; ask him and he will tell you."

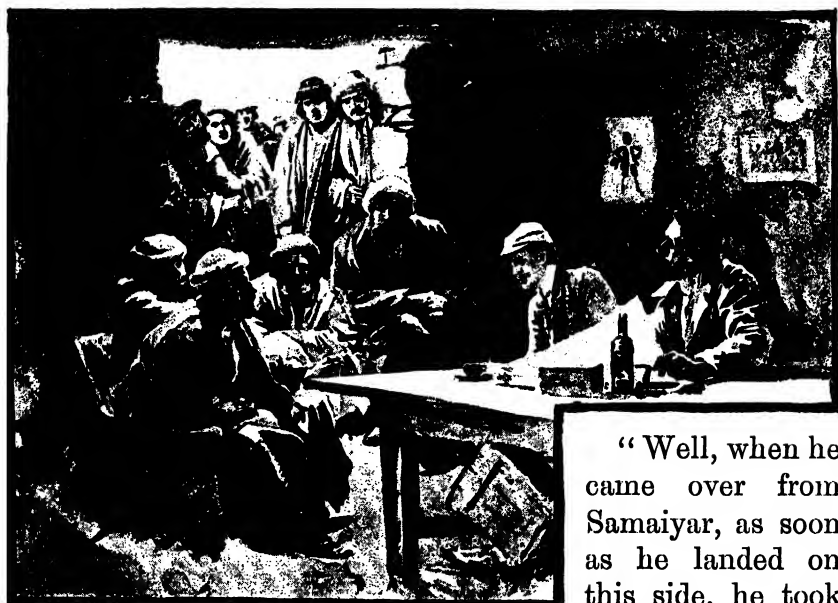
"At Bagrot," I said, "they told me stories about people who dwelt with the fairies in the mountains, but I heard nothing about sorceresses."

"Well, there is a tradition in my family that this particular sorcerer (here he changed her sex) was, in his youth, carried off from his mother by the mountain fairies, and that he stayed four years up in the snow with them, and learnt his witchcraft from them. He afterwards remained one year in Hunza. Kisro asked him why the country had become barren. He replied, 'Because you have destroyed the offspring of Shah Thum. Prosperity will not return till one of his descendants is brought to light. I can tell you no more. Search, if perchance you may find a child, for there is one somewhere alive.' So a search was instituted throughout all the Hunza villages, but no royal infant could anywhere be discovered. Then they sent across to Samaiyar, and asked the people of Samaiyar, 'Have you a child of the family of Shah Thum?' And the people of Samaiyar answered, 'If we give you the child you seek, will you swear to us that it shall not be killed by Kisro Khan?' So they swore to the men of Samaiyar. Then the men of Samaiyar said, 'Through us your country will be made fertile again. As a token, therefore, of your good faith you must promise to give us a carpet every year as tribute;' and they promised, and yearly the carpet is sent across from us to Samaiyar. One was sent only the day before yesterday, and another will be sent next year."

"Was the child made Thum?" I asked.

"No, not Thum. Kisro Khan remained Thum, but when the child came of age he made a bargain with Kisro Khan that Kisro Khan and his descendants should be Thums, and that he and his descendants should be Wazirs, and that is how I am Wazir. How many generations ago that happened I don't know. A great many generations—past reckoning."

"But tell us the end of the story about the child's coming."



IN THE MESS-HUT AT BALTIT.

"Well, when he came over from Samaiyar, as soon as he landed on this side, he took a handful of grain and scattered it

over the country, and plenty returned at once. So it has ever since been the custom for the Wazir, every year, to cast the first handful of seed at the time of seed-sowing."

"After the war," said Baird, "all the houses were messed about with flour. What was the meaning of that?"

"It is a custom derived from the same sorcerer. He told Kisro Khan that, if he desired to maintain plenty in the land, he should cause his people to do thus: when any one returned home from a journey his house-folk should

dip their hands in flour and scatter it on the traveller's head and on his right shoulder, and on the walls and door-posts of the house; and they should also make bread of the flour in which hands had been dipped, and put a lump of *ghi* upon the bread and offer it to the traveller, and he should eat it, and only then should he enter the house. This must have been what you saw, because after the war there were so many returning to their homes." *

"You spoke about the sorcerer and the fairies," I said, "have any of you ever seen the mountain fairies?"

"Oh, no! There are no mountain fairies now; they are only in the old stories. We don't believe in them nowadays."

"Now, I want you to tell me about your mountains. Have any of them been climbed by your people, and have any of them names?"

"That point up there is called Barshu Muts. A man is said to have gone to the top of it. He was hunting, and he came near the top and so climbed to it. He went up it from the other side, not from this side. Such is the story. The man lived in the time of this Thum's grandfather. That very sharp peak next to the right of Barshu Muts is called Bubuli Mutin. No man will ever stand on the top of it, I think. The great mountain above here—all the snow—is called Boiohagurdoanas. The name means 'figure of a galloping horse.' Why is it called that? I suppose because God only could gallop a horse up it."

"Have you anywhere about here any old stone figures, or carvings on rocks, or any ancient ruins from the days before Islam came here?"

"No; Kisro Khan, who was the first Mussulman Thum, destroyed all idols and such rubbish. The old idols were lingams of stone, like those the Hindus have. You must

* As to supposed influence of chiefs on the weather and crops, see J. G. Frazer's "Golden Bough," vol. i. chap. i. § 3, and chap. iii. § 1. As to customs connected with the return of travellers to their homes, see the same book, vol. i. p. 157.

have seen the little old tower near Nilt. That is very old. About it we know nothing. There are no others like it in our country."

In the afternoon, after this conversation, there was a great game of polo on the ground at the immediate foot of the town. All the natives came to watch it, and every one played who could get a pony. The Chinese Envoy from Kashgar went on to Gilgit the day before our coming, but some of his followers remained at Baltit and added to the picturesqueness of the crowd by their bright costumes. There was much drumming and blowing of pipes and a great deal of applause for the players. After watching the game for a time, I wandered off through the deserted fields, and marked the evolutions of the clouds upon the hills and their shadows over the slopes and floor of the wonderful valley.

June 19th.—We could not remain indefinitely, even at pleasant Baltit, waiting for propitious skies. Boiohagurdoanas is a difficult mountain, and it clearly would not soon be in any sort of condition for climbing. We accordingly determined to make an expedition up the Samaiyar valley and see if anything could be done there. When the morning broke, such heavy and seemingly settled rain was falling, that we contentedly turned over and went to sleep again. After breakfast the rain stopped and we were soon upon our way. I was anxious to see the whole of the Hunza side of the valley, so decided to go round by Tashot. McCormick and Roudebush came to keep me company. The others convoyed the baggage over the rope-bridges by the shorter route. For the first part of the way I rode one of the 'Thum's ponies. Riding at the slow pace of a native pony is better for looking about than walking, but it militates against collecting. The saddle of my beast was an importation from Yarkand, and was of the usual peaked, oriental type.

The horsemen of Asia seem to have developed in very ancient times their method of riding on a high saddle with short stirrups and with a curb bit. Early European

riders adopted a different principle. They were essentially bare-back riders, such as one sees depicted on the Parthenon frieze. The European saddle was a mere cloth to protect the horse's back, and by no means a seat to raise the rider. The snaffle is the European bit. Low saddle and snaffle *versus* high saddle and curb—such were the principles opposed to one another in the battles of the Crusades. It was the high saddle that won. The high saddle and a superior method of breaking-in horses were the power that carried Islam across Africa to Spain, and ultimately across Asia Minor to Constantinople. Wherever Islam went the high saddle was adopted. It became the saddle of Spain and Portugal, and was taken by Iberian adventurers to the New World, where, as the Mexican saddle, it has maintained itself. Roberts had an admirable Mexican saddle which he lent to me whilst I was with him. Thus at Gilgit, perhaps for the first time, the form of saddle that started from Asia came home again, modified and improved, after its wanderings half way round the world during a score of centuries.*

Shortly after leaving the camp-meadow we struck into an admirable broad flat path, that followed the windings of a main artery of the irrigation system. The water flowed along in considerable volume on our right hand. Canal and path were shaded by willows, apricots, and mulberries, with here and there a poplar lancing itself aloft. Now and again some huge boulder would intrude into the varying picture and cause a sudden diversion in the always winding course of the canal. At many a turn I was reminded of the well-known path beside the canal that leads to *Valle Crucis*. "Oh, Inn of Llangollen," I murmured, "would that our way might be leading us to a board as well furnished as thine!"

* These reflections were suggested to me by the torn fragment of a book I picked up in a hotel at Athens some years ago. All the first part of the book was gone, and so was the end. I know therefore neither its name nor that of its author.

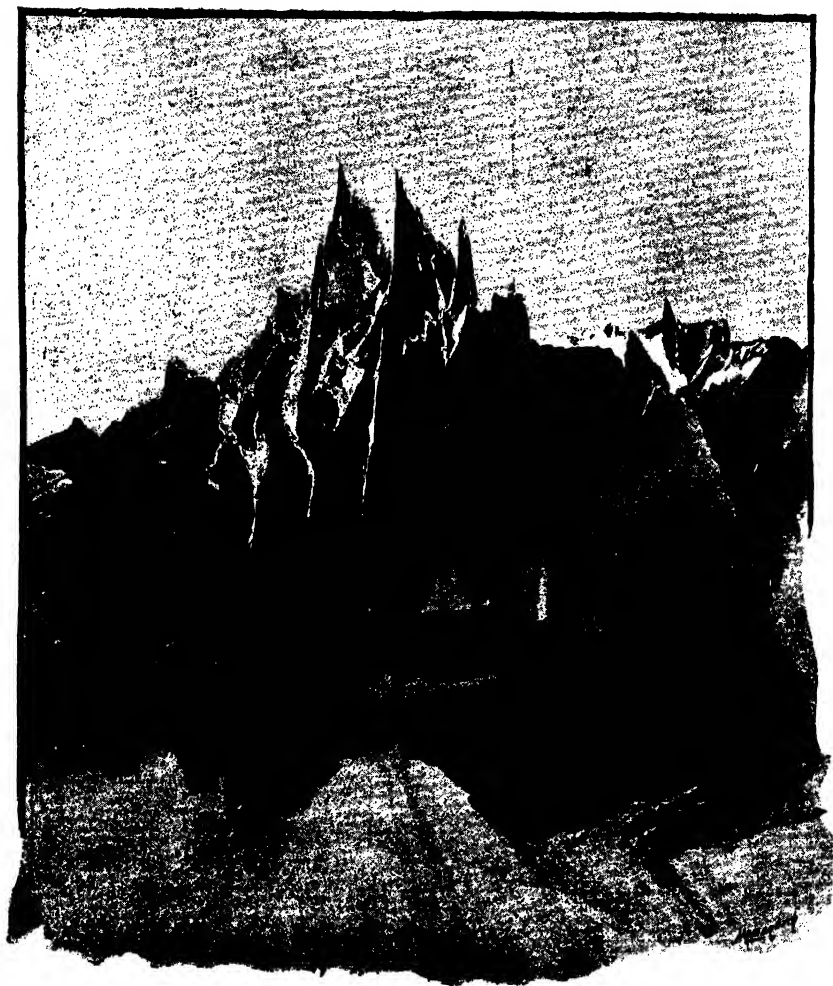
No view, however, that fair Llangollen can boast compares for a moment with the choice landscape—one of the world's choicest—that now arose before us or was revealed, bit by bit, between the bending trees. The wide Hunza-Nagyr valley with its terraced fields, dressed in fresh green by the recent rain and brightened by the newly-opening sunshine, spread itself abroad between the brown basements of the hills. Fascinating glimpses of snowy giants opened amongst the fleecy clouds. Away to the left we looked up the Samaiyar valley that was our goal, and could study the wide icefall by which the great mountains at its head pour down their perennially renewed deposit of snow.

After passing through much well-cultivated land, and near the walls of several villages, we approached the edge of the Choshi nala, into whose depths we must descend to cross the stream and mount the further bank. Here we met Bruce, recovered from his fever at Gilgit, and on his way to Baltit to join us. We advised him, as he was still weak, to continue his journey and come over to us by the rope-bridges after a night's rest. We halted for an hour to exchange news and then parted in opposite directions.

Beyond the Choshi nala there is still a little cultivation in suitable places amongst the ancient moraines collected on the valley shelf. Three or four villages support a precarious existence in this rock-bound region, where the mountain walls approach. We soon passed them and entered the desert. On our left, across the river, was the precipice, above which we knew, but could not see, that fertile Fakkar stands. On our right were bare slopes of rock and *débris*, becoming steeper as we advanced. We plunged down to the river's brink, by a very bad path, and entered a wild gorge—one of the wildest and barest I ever saw. Where its walls are most high, and its waters rage most fiercely, it was spanned by what appeared to be a bridge of great strength, built by a native engineer with

masonry and wood. The bridge was entirely swept away a month later.

We blessed the guard at the bridge for the fresh water they gave us to drink. On the far side we mounted to



THE FEATHERS OF HUNZA FROM THE HILL BEHIND NAGYR.

the village green of Tashot by the route we followed a few days before. The Kashmiri Major Makkan came to meet us and offered us excellent chapattis, with a kind of salad and some tea and ripe mulberries—a repast for which

we thankfully remember him. The ascent to Fakkar presented no feature of novelty, but Rakipushi in one direction and the Hunza peaks in the other, with their bridal coverings of fresh snow, were displayed by clouds and sun in unusual glory, and alone sufficed to repay us for our *détour*. During the rest of the march there was always some great mountain in view, so that we did not become weary of the way, nor deem the journey over long, though twilight was almost departing before we reached Samaiyar (7,350 feet), and beheld our camp pitched and the camp-fires gaily burning.



FROM SAMAIYAR.



SAMAIYAR.

CHAPTER XIII.

THE SAMAIYAR VALLEY.

June 20th.—At last we awoke to a glorious morning—peaks clear, sky bright, air crisp. For an hour we flattered ourselves that our luck had turned, though Roudebush was taken suddenly ill and had to be left behind with McCormick to look after him. It was a small party that started at seven o'clock with ten coolies to mount the valley behind Samaiyar. We followed the noisy torrent and presently crossed by a good bridge (7,475 feet) to its left bank. The grand view of the Hunza peaks behind was cause of

frequent halts. We marked with concern how clouds were again beginning to form about the summits, both in that direction and over the Bagrot mountains ahead of us. The Samaiyar valley was not altogether barren. About a mile up it we came to a cluster of fields on an irrigated fan, but there was no village. To our left mighty buttresses and jutting blades of rock rose abruptly into the air. The rocks on our right, though less astonishing, presented many picturesque outlines. When we had mounted some 2,000 feet and penetrated about two and a half miles into the valley, I observed Zurbriggen stop with gestures of excitement. I came up with him, where he was crouching behind a stone.

"Ah!" said he, "you are a moment too late! Such an animal it was as in all my lifetime I never saw! About as big as a cat, with a head like a mouse, and no tail. Its rear was like a marmot, and it hopped like one. All its legs were short, and it was the colour of that grey stone. If we hide and stay still perhaps it will come out again."

Quiet we accordingly kept, and presently out came a young marmot. It gazed at us with its keen little black eyes and concluded that it could bolt across into the parental hole without harm from us. It crept up cautiously and then hurried by and reached its place of safety amongst some big rocks. I could have caught it with the butterfly net. We saw others like it afterwards, all very small compared with those of Switzerland.

From this point to the foot of the glacier I was busy collecting flowers* and catching butterflies. We observed that the ice must have retreated about half a mile in recent times, for its streams used to irrigate two sets of fields which are now left high and dry and have gone out of

* The following plants were found, chiefly on the moraine, between 10,000 feet and Strawberry Camp:—*Hedysarum Falconeri*, *Potentilla argyrophylla*, *Astragalus confertus*, a species of *Crepis*, *Allardia Stoliczkae*, *Allardia tomentosa*, *Erigeron andryaloides*, *Oxyria digyna*, *Aster tibeticus*, *Crepis flexuosa*, *Thymus Serpyllum*, *Anaphalis nubigena*, *Potentilla Sibbaldi*, *Polygonum affine*, *Primula farinosa* var. *caucasica*.

cultivation, but their appearance suffices to show that they were not abandoned very long ago. We halted for lunch between the moraine and a convenient stream, fed by a waterfall from the rocks on our right.

Whilst we were waiting for the coolies four natives came along, lugging a roughly-dressed mill-stone over the moraine.

They had it harnessed between two short shafts. Two of them dragged it along by a rope in front and two restrained it by a rope behind. The thing rolled on its edge and gave its porters no end of trouble. Sometimes it refused to start. When, with a mighty tug, they set it trundling, it would violently pursue first one of them and then another. It insisted upon



plunging downhill when they wanted it to traverse, and upon traversing when they wanted it to descend. No stone was

YOKED TO A MILL-STONE,

ever more thoroughly possessed with the spirit of a pig. When the men saw us they let the thing lie, and came to salaam. They asked whether we had any orders for them, and then whether they had our permission to proceed on their way. About as humble a folk as are made, I should think; there must have been Balti blood in them.

When the coolies joined us we proceeded up the moraine and across a large snow-avalanche fan to a pleasant green meadow, dotted over with blossoming strawberry plants. Cattle and goats were grazing on it, and a clear brook traversed the slope. The laden coolies appeared to have done enough, so we determined to halt. We named the place Strawberry Camp. Its altitude is 11,210 feet. It is only about four hours of easy walking from Samaiyar. As soon as the tents were pitched, down came the rain again. It continued to fall for some hours. The weather was in fact as bad for a mountaineer in a difficult country as weather could be; but shortly before midnight the clouds magically cleared away, and all the sky was bright with stars.

June 21st.—Eckenstein, Zurbriggen, and I, with two Gurkhas, started from Strawberry Camp at 4.15 a.m. We intended to start sooner and to take two coolies and the light camp with us and to spend the night at a higher elevation, but the morning was most unpromising, and so we devoted the day to reconnoitring. The south wind again obtained the mastery, and clouds were forming over Bagrot. It was a fair enough morning from the picturesque point of view. The Hunza peaks were unclouded and grand in the dim light. The crescent of the waning moon was rising in the east, and the brighter stars still held their own against the growing dawn. The seracs of the neighbouring icefall seemed to cover an incredible expanse, and looked more like a frozen river than ever. As we were gazing at them a huge tower of ice lost its balance and came crashing down, breaking away a number of others in its impetuous descent. We

mounted the grass-slopes, moraine, and ice-worn rocks, which form the left bank of the glacier. We made rapid progress, being lightly loaded, and in two hours reached the top of the moraine (14,300 feet) and entered into the sunlight. To our mingled joy and regret the day turned out magnificently, and the threatening clouds all melted away. We could not only see in unveiled splendour all the height of Boiohagurdoanas and his immediate neighbours, but other



BOIOHAGURDOANAS FROM THE SAMAIYAR VALLEY.

great peaks began to disclose themselves further to the west in the Budlas nala direction, and of these we never before gained more than a momentary glimpse. While we were gazing at the glorious view, framed in between the rocky and precipitous sides of our valley, we beheld, as it were, a puff of smoke arising in the higher regions of the Hunza peaks. It grew and descended rapidly; evidently it was an avalanche of extraordinary size. Its dust cloud filled the whole Ultar nala, and seemed to be about to envelop the

town of Baltit itself, but it reached no further than the stone-covered snout of the Ultar glacier, which it whitened from side to side. After half an hour's halt, devoted to plane-tableing, we put on the rope and continued our ascent, keeping over steep avalanche snow by the left side of the glacier. We thus (in three-quarters of an hour) emerged upon the plateau, separating the lower from the upper icefall, and here we again made a halt for purposes of observation. Everywhere there were accumulations of deep new snow, and not a peak, that we could see, was approachable. As the sunlight waxed in power the slopes awoke and began to toss off their white mantles. In particular a peak, or rather the culminating portion of the long ridge west of the Samaiyar glacier, resembling the Lyskamm, and very conspicuous from Baltit, sent down avalanches of all sizes one after another; the growling of its batteries became continuous, and remained so for several hours. We called it the Growling Peak.

It was evident that the only way to get past the upper icefall was close to the rocks that shut it in on the right. This involved crossing the whole width of the plateau between the icefalls. The plateau was a mass of great schrunds, for the most part, at this time of year, bridged over with snow, and only yawning in places; later in the season it would doubtless give much trouble. Zurbriggen led us over it in something less than an hour. But for the great heat of the sun and the softness of the snow this would have been a delightful traverse, for we were in the midst of grand scenery. Ahead of us was a side valley of gentlest inclination (the Trough) leading to the Daranshi pass, to which we afterwards ascended. On our right was the upper icefall—a magnificent display of nevé serac—with the top of the Crown of Dirran peeping above it. On our left the glacier bent over and disappeared, but above it were all the Hunza peaks, and the others further away (to which I have already alluded), visible from base to summit. One of them is a specially grand peak—a

vaster Weisshorn. This fine group of mountains has never been surveyed and scarcely approached by any traveller.

At the opening of the valley leading to the pass we found the object of our search—a suitable place for camping. We determined to go no further, but to reserve our forces for the morrow and the day following. Accordingly we spread a mackintosh sheet on the snow and spent two hours lying upon it. Our height was about 15,130 feet. During the last portion of our ascent I suffered from shortness of breath. Intentionally quickening my rate of breathing to 38 to the minute, I experienced immediate relief. I was then not only able to advance faster than before, but without fatigue or any discomfort, and the unpleasant sensations did not return. After finishing my work at the plane-table my rate of breathing had diminished to 20 to the minute; an hour later it had sunk to 15 to the minute, when I was making no exertion.

At 11.20 we started to retrace our steps and reached the unroping place at the top of the moraine in an hour and a quarter's walking. We were able to go at a steady pace, for all the view was blotted out by clouds, and there was nothing to tempt us to linger in these elevated regions. We brought up almost no provisions and nothing to drink, so that camp possessed powerful attractions. I collected several plants on the way down the moraine, but could not find some that I noticed in the morning and left to be gathered on the descent.* So is it always. The flora here seems to be practically identical with that of Bagrot, and there seemed to be no plant that we had not previously met with on the south side of the range.

June 22nd.—At 5.45 a.m. we left camp, with three coolies to carry our light tents and a kilta of provisions. Habiba with the rest of the things was sent down to McCormick and Roudebush at Samaiyar. They went on with them next day

* The following plants were also found on the moraine above Strawberry Camp :—*Draba incana*, *Dracocephalum nutans*, *Saxifraga sibirica*, *Potentilla gelida*, *Viola canina*, *Thlaspi alpestre*, *Sedum asiaticum*.

to join Bruce at Nagyr. We followed our route of yesterday, though going at a more leisurely pace, for the coolies were heavily laden and had hard work before them, which, truth to tell, they appeared to relish little. They wore rough pieces of untanned sheep-skin with the woolly side inwards, fastened on their feet with infinite windings of weak leather thongs. The thongs were always breaking, and they tied the ends together in a "single sheet bend."

As we went up the moraine and approached the snow we heard the cry of chukor answered from across the hill by a continual cuckoo, whose voice reached us at a height of over 13,000 feet. Many specimens of a white butterfly with green stripes on its wings (*Pieris callidice*) flittered over the moraine, but they were wary and swift of wing and defied my panting efforts to catch them. It took us two hours to reach the top of the moraine and half an hour more to the glacier plateau between the icefalls. The snow was already soft when we turned to the left and began to cross towards our proposed camp.

The state of tension of the whole mass was manifested by the loud reports with which it cracked under our weight. The same thing happened on the previous day and greatly surprised the Gurkhas. The phenomenon is common in the Alps, but I never heard it so frequently, nor the noise so loud, as on this occasion. It comes unexpectedly upon the silence of the snowfield, and is accompanied by no visible movement of anything. It is like the whiz of



TYING ON PABBUS.

a thing flying through the air close to one's head, rather than a noise under one's feet. The cracks we caused on the preceding day had already widened to an inch, and would widen to a foot in course of a week or so. In an hour we reached our former halting-place, and a stray moth fluttered down amongst us, carried thus far from its wonted haunts by wayward caprice or irresistible air currents.

We were at the opening of the side glacier which I named the Trough. Looking straight up it there was a ridge on either hand. That on our right is the one over which the main Samaiyar glacier is obliged to tumble in its upper fall. It was at the base of the ridge on our left that I proposed to camp. We crossed to the selected spot in about half an hour, and the coolies soon afterwards brought in their loads. When the little Mummery tents were pitched at Trough Camp (15,460 feet) snow began to fall, so I crawled under cover and slept for two hours or more.

These little tents are all very well to sleep in with fine weather, but when it is wet, and two or three men have to struggle together in the confined area of six feet by three, and there is only head room for the middle one to sit up, a more comfortable day-shelter may be imagined. Moreover they let in damp everywhere, and one introduces a certain amount of snow on crawling through the depressed door, so that soon enough, do what one may, everything gets more or less moist and clammy.

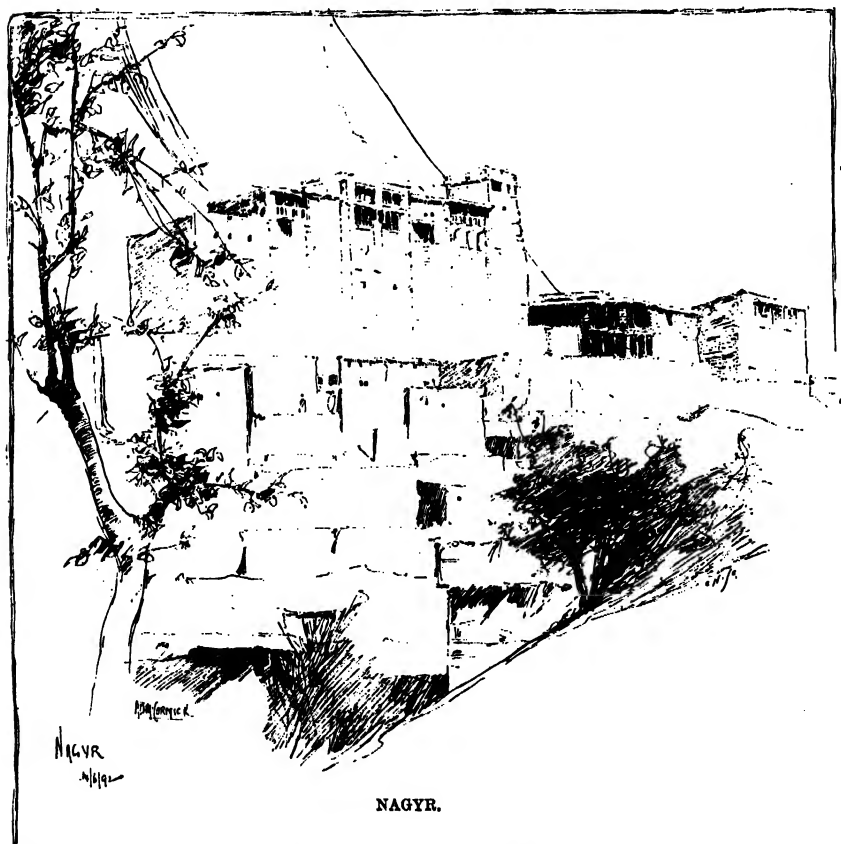
Fortunately, the weather cleared again in the middle of the afternoon, and one by one we took to the rocks above our tents and began, rather aimlessly, scrambling up them. These rocks are of a hard conglomerate, and the fragments are angular and of every size. The broken portions of our ridge must of necessity find their way down the right bank of the Samaiyar glacier, but the ridge continues under the lower icefall, and the conglomerate crops out on the other side, for I found fragments of it common on the left moraine. As we were scrambling in different directions over the rocks we found a number of plants already in

flower. There was *Edelweiss* and *Sedum*, and of course the irrepressible rhubarb, just beginning to sprout.* Thus, climbing and collecting, we all wandered upwards, I for the most part following Zurbriggen. In due time we reached the crest of the ridge. Not far away from us was a white dome whose attractions were irresistible, for the clouds were opening on all hands, and wondrous views might soon be expected. We waded through soft snow to the summit (about 300 feet above camp), and were well rewarded for our pains. The upper basin of the great glacier was now before us, no longer hidden by the wall of seracs. We could estimate its extent, and could follow it up to the wide Bagrot saddle. We eagerly scanned the icefall and discovered a route up its right side which would be practicable with good snow. Unfortunately the snow was as bad as bad could be. There was no other way by which the obstruction could be turned. Eastwards the long Trough lay before us with an attractive col at its head. Some two and a half miles of gently inclined snow led to it between the bounding ridges. But it was to the north and north-west that our eyes were most drawn, for there the great mountains of Hunza, Muchi-chul, and Choshi, were playing at hide-and-seek amidst the changeful clouds. The rapid appearances and disappearings of great peaks that we wanted to recognise, the tantalising part-revelations, the clouds that seemed to be dividing but only gathered the more, the unexpected clearings where the mists were thickest, the un-Alpine veils through which far-off ranges could be traced, gave to this view a character best described as exciting.

How long we may have stayed to watch its varying phases I know not, but by six o'clock we had glissaded and scrambled down to our camp, wishing for an axe in not a few places where there was hard ice under the rotten snow. As we were seated at our evening meal the sun

* The following were also found on the rocks behind Trough Camp:—*Leontopodium alpinum*, *Saxifraga imbricata*, *Cheiranthus himalaicus*, *Isopyrum grandifolium*.

went behind Growling Peak, and frost instantly set in. The sky assumed in turn all the glories that the departing day is wont to fling behind him, but we were too cold to watch them for long, and before darkness prevailed we were in our sleeping-bags, settled down for the night. For some reason sleep would not come to me, and, hour after hour, I lay awake, listening to the silence. There



NAGYR.

was no faintest hum of glacier torrent, no most distant echo of falling stone or rushing avalanche. Not a serac cracked. Not a breeze brushed the surface of the snow, nor whistled how quietly soever across the rocks. At last there came a faint pattering on the roof of the tent, and snow began to fall. It broke the strain of my wakefulness, and I passed through the gate of sleep into the happy land of dreams.

June 23rd.—At 2.30 a.m. Eckenstein's alarm watch (hitched somehow into his cap) began rattling about his head, and we were all duly awakened, but alas! to no good tidings. He looked out, informed me that the weather was bad, and advised against starting. At four o'clock conditions were, if anything, worse, and snow was falling. At six we rose in considerable disgust. The night had not been cold (minimum 23° Fahr.), and there was much new snow. It was clearly impossible to get up the icefall. After breakfast I determined to do something, so, to the disgust of some of the party, I had the rope put on, filled our pockets with biscuits, and started off up the Trough towards the col at its head.

We were soon in cloud and snowstorm, and had, as it were, to feel our way up the narrow glacier, which fortunately was only broken into schrunds for a short portion of its length. When we reached the plateau above the schrunds the snow became very soft, and we had to wade knee-deep the rest of the way; but at last, after three hours and a half, we got to the col, which I named the Daranshi Saddle (17,940 feet). To our delight the weather cleared up most unexpectedly, and we again enjoyed a magnificent view. Behind us there was little to expect, save a vista of the ungraceful Growler, seen down the monotonous Trough, but on the other side the slope fell steeply away for some 7,000 feet, and the vision plunged into a glacier basin of extraordinary size and grandeur.

The Hopar valley, which joins the Hispar valley about two miles above the town of Nagyr, soon itself divides into two branches named Barpu and Bualtar. Both are filled with tortured ice-streams which unite at Hopar. We were looking straight down on to the Bualtar glacier, and across to the fan-like arrangement of ridges beyond it. We could see on our extreme right the Crown of Dirran, which stands at one angle of the Bualtar nevé-basin. Now and again, as the wayward clouds permitted, we could trace the line of the watershed going eastwards for several miles to

the Emerald Peak at the furthest angle of the basin. We could watch the tumultuous and serpentine course of the glacier's many branches, and behold their final union at our feet, and we could see that, save for a few lofty plateaus of nevé, edged around with cliffs, over which the whole was ultimately tumbled, the vast area of ice was a riven cataract from end to end. I doubt if a man could cut his way up it in a year. Grand and interesting as was this portion of the view, and topographically of special importance to me, I found it hard to fix my attention long upon it, for away to the north was another and a mightier mass of mountains, unexpected, unexplored, unnamed. They rose beyond the relatively low furrow which marks the course of the Gujal river. Three giants there were amongst them, noble in form and fine in grouping. Senseless outlookers upon a world of ice, monarchs of a kingdom untravelled and unknown. Things wasting their splendour where there is none to admire, flashing back sunrises and sunsets only upon their fellows sightless as themselves. "Why this waste of magnificence?" I asked, with some feeling of bitterness, and the clouds, for answer, closed it from my view.

The lateness of the hour of our starting, the softness of the snow, and the re-gathering about us of the clouds, rendered it useless to attempt the ascent of a peak south of the pass, which would otherwise have been an easy promenade. Accordingly, when there was nothing more to be seen we turned to descend, and ploughed our way back to camp with an expenditure of labour almost as great as that involved in the ascent. We reached the tents in fog and falling snow after two hours and a half, and devoured our lunch while sheltering miserably under sheets of mackintosh. We then crawled up the neighbouring rocks and crowded ourselves into a comfortless cranny, which served to protect us from the unceasing snow till we could persuade ourselves that evening was come and we might decently retire to our bags for the night.

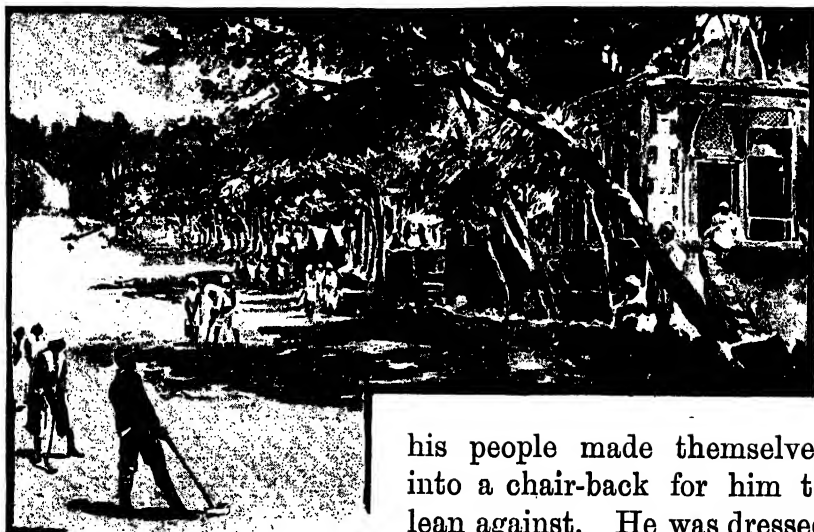
June 24th.—With slight intermission the snow kept falling all night, and when the morning dawned there were four more inches of powdery white spread everywhere around us. The temperature had not been low (minimum 20° Fahr.), but low enough to freeze the tents as hard as a board. Further climbing was out of the question for at least two days, even if the weather should prove fine, and fine it had no appearance of becoming, so we packed up our traps and started down about half-past seven, the two Gurkhas manfully shouldering loads of about 60 lbs. each, and cheerfully wading with them across the heavy snowfields. Arrived at the top of the moraine on the far side I bade them leave the things and send back the coolies to fetch them ; but this they would in no wise hear of, insisting, first of all, upon carrying them to our old camping-place, then upon taking them to the huts by the highest fields. When they found no men there, they finally carried the whole down to the village of Samaiyar, where they were at last relieved by three coolies. They accomplished this severe piece of work with the utmost good-humour. Next day they allowed that they were a little stiff in the limbs, but this did not prevent them from violently playing hockey from morning to night.

On reaching Samaiyar we found that the rest of our party had gone on to join Bruce at Nagyr, so the tiffin, to which we were looking forward, had to be postponed, and its place taken by a five-mile walk over a rough up-and-down hill-track. At Nagyr our party was once more united, and we settled down for a couple of days before starting towards Hispar.

June 25th and 26th.—These two days were, of course, the finest we had seen in the mountains. The weather was faultless, and so continued till we approached our climbing-ground once more, when it duly broke up. However, fine days, wherever they come, mean fine views ; and Nagyr is, as I have stated, nobly situated, though less nobly than Baltit. I was busy all the time making inquiries about the way, discussing the question of provisions, seeing

to the packing and distribution of the baggage, some of which was to go back to Gilgit, some over the Nushik pass to Skardo or Askole, and the rest to come with me over the Hispar pass. Into the Gilgit kiltas I packed all the negatives taken thus far, my collection of insects, and other small but precious objects, all enclosed in tin boxes. I was, as the reader knows, destined never to see them again.*

During the day the old Raja was carried down to visit us. We planted him on the ground on a blue rug. A couple of



THE POLO-GROUND AT NAGYR.

his people made themselves into a chair-back for him to lean against. He was dressed little better than an ordinary coolie. The villagers sat

round at a respectful distance, Munshi Sher Amad kneeling in the Egyptian scribe manner, as was his wont. Zawara, the big lambadhar, sat somewhat in front of the rest, wearing a blue shawl. The inferior folk gathered at a distance on a grass slope, content to see, without being able to hear. The boys of the village played hockey up and down the polo-ground before us. Every one was

* Since this was in type (October, 1893) the negative films have arrived in London; but ill-luck pursued them. They were opened at the Custom House, and light was admitted to them.

quite at his ease. There was a soft movement in the fresh air, and the chinar trees enveloped us in a pleasant shade. We talked chiefly of the country and the passes. The old Thum affected utter ignorance about them, advised us not to venture on the snow, and complained of his age and infirmities. He asked about our visit to Hunza, and confirmed the names of the peaks that had been given us there. Occasionally he took a pinch of snuff and rubbed it on his gums: two men immediately ran forward and held forth their shawls for him to wipe his fingers on. There was rather a race for this honour. We promised to come and visit the old man next morning in his palace, and so took our leave.

McCormick and I wandered off up into the town, accompanied by the Munshi and a miscellaneous following. We went into what I supposed to be the mosque, but Sher Amad said it was a *Matam Sara*, or Place of Mourning. I did not at first understand what they



INTERIOR OF THE MATAM SARA, NAGYR.

meant by this, so they showed me in pantomime. The Munshi sat on the *mimbar*, and explained that he was preaching about Hasan and Husain, whilst the people were weeping and mourning for them, deeply moved by his words—in fact, the ordinary Moharram business of the Shias. All the architectural features of the building are of wood, and it is, in its general plan, imitated from the Shah Hamadan mosque in Srinagar. Through one of the windows we caught a beautiful glimpse of the Golden

Parri and its neighbours. The whole place was in bad repair. They said it was built by the Thum Kamal Khan, that Madu was the architect's name, and that Kashmiri workmen were employed upon it.

We wandered through the dirty alleys of the town, and climbed on to the roofs of some of the houses. Formerly there must have been a larger population, for many houses are in ruins. On the side towards the river there is an appalling precipice, up to the very edge of which dwellings are built. My companions seemed eager to do the honours of their city and to tell me everything I could possibly want to know. When they found that I was interested in their names for things, they pointed to this and that, and said, "Name—so-and-so." *

Just below the Thum's palace there is an open space, and by it is a wooden portico with pretty arches and carving. This, they said, was made for the present Thum by a Gilgit workman, named Sonno. As we were returning to the polo-ground, by way of the town gate, we met a man with a sort of mandoline, which he was willing to sell. It was strung with four wires, all tuned to the same note. Its belly was decorated with a gaudily-coloured label, which formerly adorned some packet of Russian goods. This instrument is now mute in London.

Next morning we fulfilled our promise, and went in a body to visit the Thum in his palace. There were men posted on the look-out for us all the way up, so that he might know when we were going to arrive, and be ready to receive us. The exterior of the palace is rather imposing, in a rough-and-tumble sort of way, and so, too, is the entrance, which leads into a small courtyard between the palace and Matam Sara; but once you have crossed the

* The following may be worth record:—Crude brick, *dishtik*. Stone, *dan*. Wall, *bal*. Wall built of stones with horizontal layers of wooden beams, *hunniwashi bal*. The town wall, *godar*. The thorny stuff with which the walls are surmounted, *chush*. Door, *hing*. Door-frame, *saran*. Door-lock, *serik*. Key, *che*. Lock-pin, *imekus*. Square hole in the middle of the roof, *sam*.



THE GOLDEN PARRI FROM NAGYR BURIAL-GROUND,

threshold of the actual door of the house, all style ends. You plunge into a dark hole, like a cow-stable, from which you climb by notches cut in the sloping semi-cylinder of half a tree-trunk to another dingy, irregular, and empty chamber or passage. How they hoist the old Thum up and down there, Heaven only knows! No wonder he finds his infirmities burdensome! Then you get out on the roof, and climb another notched tree to another roof, which gives access to the Raja's reception-room. This is a chamber



INTERVIEW WITH THE RAJA OF NAGYR.

on the top of the palace, about 18 feet square (if I remember right), with a sort of loggia on one side, freely admitting the air, and commanding a fine view southwards over the town and fields. It is only roofed in round the sides. The inner beams, that carry the roof, are supported on wooden posts at the four corners. The room is, in fact, a kind of diminutive cloister. The Raja was sitting in an old English leather-covered arm-chair, which looked as though it might have come out of a London club smoking-

room. It was a present from Gilgit. There were also seats for us. The natives squatted round the walls in regular order, every man according to his rank. I photographed the group as well as circumstances permitted.

I forget what we talked about—passes, I suppose, with the usual failure in getting information. The old man asked for medicine for his bad leg—he was troubled by rheumatism of many years' standing. He would not believe that I had nothing for him, so, to set his mind at rest, I gave him a tube of *lanoline*, and told him to make the Munshi rub his leg with it for an hour every morning ! He said he had ordered a great *tamasha* in our honour, to be held on the polo-ground that afternoon.

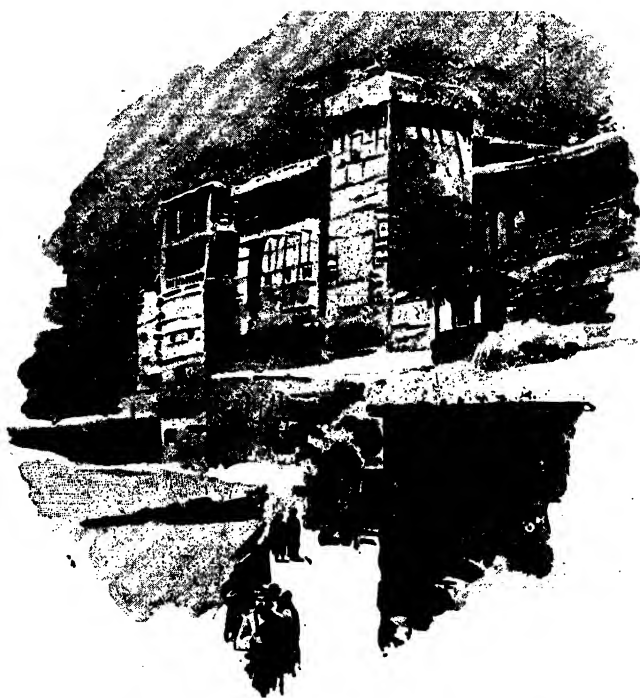
Before the *tamasha* came off, Parbir and Amar Sing got hold of the heads of two recently decapitated rams, and fell a-butting one another with them, making strange sounds the while. They fought with such good will (on all-fours, of course), that one of Parbir's horns made a bleeding hole in Amar Sing's head, to the inexpressible delight of both men. After that they took to hockey again, and Bruce with them. I forget who was wounded in that game—probably Bruce.

I had an immense amount of writing to get through before night, *tamasha* or not. Accordingly, after watching the dancing and drumming for a short time, I sat down to work. The centre of the din was just in front of my tent, where for three hours or so it was as though all the fiends had been let loose at once. Years ago, whilst travelling about Europe, I wrote a book, chiefly in the waiting-rooms of railway-stations. That experience now stood me in good stead. After a few minutes of effort the noise ceased from troubling, and the needful work was done.

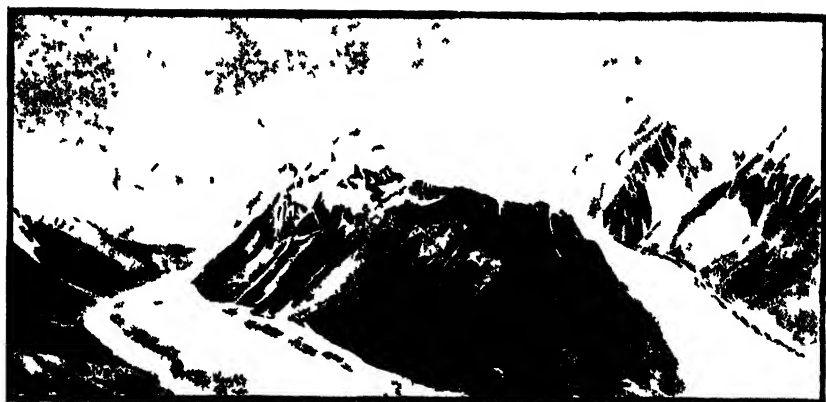
Ultimately the sun went down, and the people wandered off and left us at peace. The evening light cast magic over the trees and pretty mosques and ziarats by the polo-ground. When night came on, the only sound that broke the perfect stillness was a gentle breeze, stealing through the tops of

the poplars. I lay for hours listening to it. The sleeplessness that overtook me at Trough Camp maintained its hold. I suppose I was a little overworked.*

* The following plants were found in the neighbourhood of Nagyr town :—*Thlaspi alpestre*, *Crepis flexuosa*, *Campanula colorata*, *Malcolmia africana*, *Potentilla bifurca*, *Potentilla multifida*, a species of *Crepis*, *Erigeron monticolus*, a species of *Potentilla*, *Carum Carui*, *Gentiana squarrosa*, *Medicago lupulina*, *Myosotis sylvatica*, *Cynoglossum denticulatum*, *Hieracium umbellatum* var. *lanceolatum*, *Capsella Bursa-pastoris*, *Convolvulus arvensis*, *Stachys tibetica* var. *pinnatifida*.



NAGYR. THE PALACE FROM THE MAIN STREET.



THE SAMAIYAR BAR AND SHALLIHURU GLACIERS FROM RASH RIDGE.

CHAPTER XIV.

NAGYR TO MIR.

June 27th.—The coolies, who understand nothing about hours, were ordered to be on hand “at break of day.” When I awoke at six o’clock none had arrived, so I set a man to hunt them up, but he contented himself with standing in the middle of the polo-ground and howling at the town. Another, despatched after him, merely added to the din; but the method seems to have been the correct one, for ultimately the needed carriers turned up. They were strong, willing fellows, and gave no trouble. Our march was to be short, for which I was thankful, as there was a complicated bit of surveying to be accomplished by the way. Knowing the path as far as Birkat, where there is a remarkable canal carried on a high wall, I enjoyed it the more, for the morning was grand, with perfectly clear skies, and wondrous views over the trees and fields rich with strongly-growing corn. From Birkat one commands a view of the great division of the valleys, and this was said to be the last point to which any European previously penetrated in this direction.

This place of division is both grand and interesting, but more interesting than grand. The bare range on the left and the desert Hispar valley up which one looks are almost ugly in themselves, but they serve as striking contrasts to the fruitful areas so numerous on the hillsides to the right, and there are fine snow-mountains ahead. The characteristic feature in the view is, however, the enormous old moraines with which the broad area at the mouth of the Hopar valley is filled, and the black, broken, shrunken, but still vast ice-stream that comes down amongst them, almost to the Hispar river.



CALLING THE COOLIES.

We descended from the Nagyr slopes, and, bending round to the right, reached the bottom of the Hopar valley and advanced leisurely up it. It is, in a sense, the most remarkable valley we saw. Right and left of us were great moraines

and all the furniture of a well-appointed glacier, but glacier there was none in sight. The moraine (some 500 feet high and quite precipitous) on our left hid the snout of the Hopar glacier from us, at the same time supporting on its broad back the village and fields of Shekámáti, a dependency of Hopar. Where the lost glacier should have been was a gently sloping, half-mile wide floor of valley, all green with corn and meadow. The ice from the Sepultar valley formerly came down here and joined the other glaciers. We wandered up through the fields in the bright morning light, chasing gay butterflies, which refused to be caught, and gathering flowers.

We soon came to the top of the hollow way, where once two glaciers joined, and there I left the others and mounted to the summit of a high moraine mound. Hence I could see straight down the cultivated glacier bed we had come up, or, turning round, could look up a similar but smaller and quite barren trough, like a huge curved railway cutting, from which the glacier that made it might only have retreated a year or two ago, so fresh are its traces. A more puzzling bit of topographical detail it would be hard to invent. The larger view that surrounded me was of surprising grandeur, and the eye wandered from the wall of the Hunza peaks round to the Golden Parri and its fine neighbours, and then on to minor, but still great, snow-peaks, which stood out at the heads of various smaller valleys. The day was perfectly clear, and the sun's heat intense. Never was the labour of surveying more laborious, and there was so much new ground to be plotted in, so much to be done. For two hours I stood in the frying-pan, surrounded by sand and rocks and graves. A single pole, with a bit of white rag flapping from it, marked the neighbourhood of the bones of some forgotten fakir. It was too hot to smoke, but I kept a coolie busy fetching me muddy glacier water from a canal not far away. Ultimately the work was done, and I continued my journey. A few minutes took me down to cultivated land, and the broad green basin of Hopar lay

before me. The Nagyr valley, and the way to it, were shut out from view, and I was in a new region.*

The basin is about a mile wide and nearly two miles long. On two sides it is encircled by admirably irrigated skirts of high hills, and on two sides it is enclosed by glacier, which, however, cannot be seen. A wall of moraine shuts it out from view, and it is only by looking up the tributary valleys that one perceives what vast icy streams are in existence close at hand.

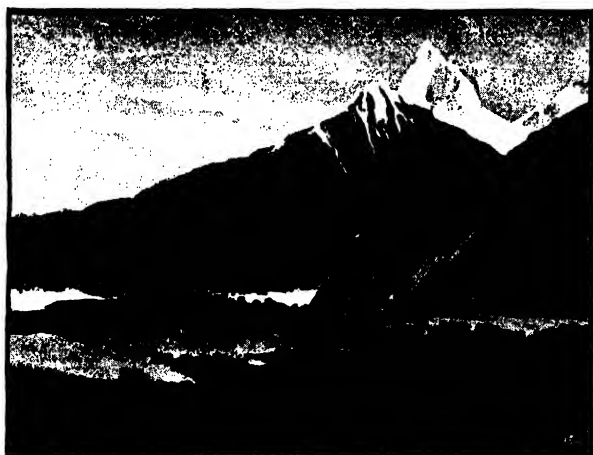
Hopar consists of five villages—Hakalshal, Rattallo, Boroshal, Ghoshoshal, and Holshal. We passed below the first of these, and a few hundred yards beyond it came near the walls of Rattallo.

On approaching the village I was met by the returning coolies. The lambadhar decreed that two annas was the right pay to each man for their rather toilsome five miles march. When they saw me they came, in the best of tempers, and barred the way before me, locking their arms together. "I have no tongue," said a leader, "but this," showing me a *chilki*, "for us," pointing to himself and three companions. I agreed that it was small pay, and promised them bakshish at the tents. I almost regretted my complaisance, for they immediately swarmed about me, seizing my hands and kissing them with vigorous snacks. They are a pleasing folk, these men of Nagyr. Of course the camp overflowed with them. They watched our doings with unflagging interest. They brought in what we needed, but begged us not to ask for much flour, as their stock was getting low; their little sheep were amongst the plumpest and tenderest we encountered, nor did they try to palm off the invalids of their flocks.

All the Hopar villages are pretty, and Rattallo is no

* The following plants were found on the march from Nagyr to Rattallo:—*Capsella Bursa-pastoris*, *Campanula colorata*, *Hyoscyamus niger*, *Geranium collinum*, *Arenaria holosteoides*, *Lactuca dissecta*, *Medicago sativa*, *Potentilla anserina*, *Orchis latifolia*, *Conringia planisiliqua*, *Plectranthus rugosus*, *Stachys tibetica*.

exception. A decent mosque greets one at the outskirts, close to the polo-ground. Near it is the veranda-surrounded dwelling of the *Trangpa* (lambadhar) and a pond of greenish water, perhaps, like others hereabouts, a relic of pre-Moslem days. McCormick chose an admirable site for our camp, on a narrow terraced field (9,220 feet), shaded by fruit trees. It commanded a grand view of all the Hunza peaks, and the junction of the great glaciers of Barpu and Bualtar. Noon was past when I arrived, tired and hungry. The tents were already pitched, and tiffin was prepared. What more could a weary traveller desire?



RASH FROM RATTALLO.

In the afternoon I wandered off with Bruce to the edge of the Hopar glacier's left moraine, and learnt the secret of that barren glacier trough, like a railway cutting. Formerly the Hopar glacier, when it was full

to the brim, used, of its superabundance, to throw off an arm to the left, which made the trough. Now the ice has so shrunk that the straight course more than suffices to carry its still considerable volume. In its shrinking the surface sank some 400 feet, so that the crests of the old side moraines look down upon it from that height.

When we returned to camp I discussed plans with Bruce. We were short of all manner of necessary stores, such as salt, sugar, and tobacco. It seemed best, therefore, that he and Eckenstein should hasten away over the Nushik La and relieve us, for there are none of these things

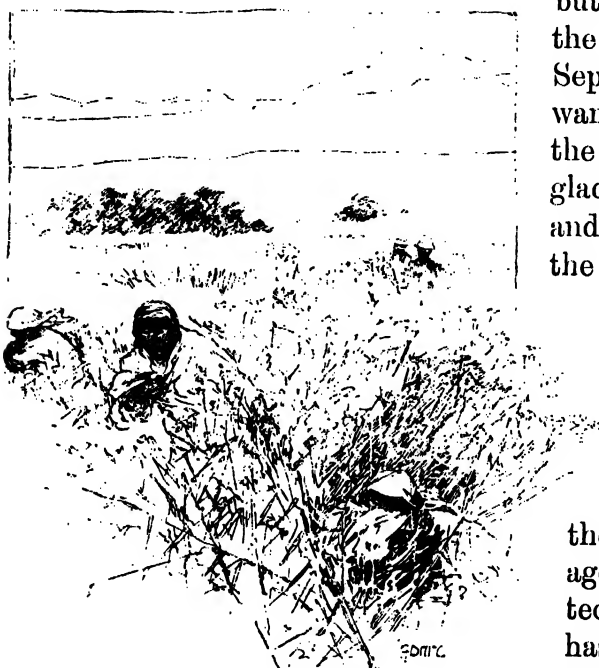
to be had in Hunza. This decision involved a good deal of arrangement in details, and the evening had to be devoted to getting together the needful supplies for their journey, ordering coolies, and the like preparations. As I sat writing in the tent at night beautiful little green moths (*Nemoria gelida*) flew in, attracted by the candle. We only saw them in this district, between Nagyr and Hobar.

June 28th.—Bruce and Eckenstein, with Parbir, Amar Sing, Wazir Nazar Ali, and their coolies left camp at an early hour. When they were gone Zurbriggen and I started for a surveying scramble. We went out at the back of the camp and followed the path a few yards, round to the mouth of the Sepultar nala. There we struck an admirable cow-track which led us diagonally over the north face of the hill called Hunnuno. After following it steadily upwards for a couple of hours, we turned a corner and gained some sort of a view up the Bualtar glacier. To see it properly we had to scramble to the crest of the east ridge of Hunnuno, a narrow arête of rocks and grass. There we were about 2,500 feet above camp, and in a central and commanding position.

Unfortunately clouds veiled the summits of many of the highest peaks and destroyed the fulness of the hoped-for view. Still, there was enough to be seen. We looked straight up the Bualtar glacier and could identify the flanks of the Crown of Dirran, the two Burchi peaks, and the Emerald pass. The way down from it on this side appeared easy, and, if we had reached the col, we could have descended to Hobar. The summit of the Emerald peak was never disclosed. Round to the north-east we had before us, one above another, the many parallel ridges that cut up the country between Gugal and Hispar. Most interesting to us and most conspicuous was the long line of high snow-peaks which bound the Hispar valley on the north, and under which we must go to reach the Hispar pass. Behind them were the giants of Gugal; next, in clouded splendour, round to the left, came the wondrous mass of Hunza, and

further round the nameless mountains of Budlas, which we never beheld unclouded. Where so much was visible there was of course plenty of work for a surveyor, and the two hours of our halt passed rapidly. The others collected flowers for me, and generally hunted around, but probably found the time somewhat long.*

In our descent we left the cow-track about two-thirds of the way down, and crossed to some fields on a jutting



FRIGHTENED NATIVES AT HOPAR.

buttress of rock at the mouth of the Sepultar nala. We wanted to look up the nala to the small glacier at its head, and to investigate the castle or watch-

tower which stands on the point of the jut. The natives informed me that

the castle was built ages back to protect the grass. It has no name. The canal that waters these fields is a

fine bit of work. It is carried along the precipitous face of the Sepultar gorge for a great distance, and then it crosses to the other side of its ridge through a deep cutting or jag, artificially made and carefully maintained.

* The following plants were taken at the highest point reached on Hunnuno:—*Cotyledon Lievenii*, *Acantholimon lycopodioides*, *Erigeron andryaloides*, *Valeriana dioica*, *Aster tibeticus*, *Leontopodium alpinum*, *Anaphalis virgata*, *Astragalus adesmiaefolius*, another species of *Astragalus*, *Malcolmia africana*, *Gentiana detonsa*.

We reached camp in time for tiffin, and ready for it as it for us.

After a short rest McCormick and I sallied forth to visit again the left moraine of the Hopar glacier. We wandered leisurely by a winding path, through fields of green corn and blossoming beans, amongst which there was a quantity of mint in flower. Here, as elsewhere, whenever we approached women or children, they bolted away from us or tried to hide themselves. If their houses were near at hand, they ran for them like rabbits into their holes. If the familiar shelter was too far away, they hurried into the cornfields and cast themselves down amongst the corn, by which they were completely concealed. These people have the habit of war deeply ingrained. A stranger in their fields, who is not a prisoner, is a conqueror. They are utterly unaccustomed to strangers. Their attitude towards one who travels freely amongst them is thus an attitude of fear, which, however, if you come close to them, is easily dispelled, and then they become the friendliest folk in the world, and will do anything for you.

We halted a moment by the ziarat at the gate of Holshal to talk to the loitering men. The women do the bulk of the field-work in these parts, and the men do the loitering and gossiping. These were a shy set. "We have no tongue," they said.

I tried a little Yeshkun on them, and they gradually brightened up. "What is the name of the fort behind your village?"

"It has no name."

"Who built it?"

"We don't know. Perhaps Gohr Aman."

"No," said one; "it was Gohr Aman's shikari!"

We walked on to the fort (9,340 feet), which interested me very much. It is visibly old, and has long been in ruins. It must have been in ruins in Gohr Aman's time. Its object is to block the ascent from the glacier to the fields. The moraine's precipitous face towards the glacier can only be

ascended at this point, and the fort was built to block the way. But against whom? At the foot of the chief moraine precipice there is a chaos of smaller moraines, marking various changes in the level of the ice, but the main moraine marks a single epoch of glacier contraction.

We climbed to the highest point of the moraine ridge at its angle, and withstood the rising wind for some minutes while we inspected the fine broken surface of ice at our feet, looked up towards its sources, and noticed the series of parallel dirtbands that decorate its surface. At this moment the whole Bualtar valley became filled from side to side with a dense cloud, carried along swiftly by the wind. It was a dust-cloud, caused by some great stone avalanche fallen in the recesses of the hills, but the faintest echo of its thunder did not reach us. The cloud passed by, filling our eyes with sand, and dispersed not far from Nagyr. The glacier-ward face of the great moraine is constantly falling in, and puffs of dust may always be seen arising from it at some point or another, but the sound of these falls is not audible from the fields. The visibility of the action of Nature's forces and their apparent soundlessness does more to impress the size of these mountain regions upon one's senses than anything else.

We proceeded downwards, along the moraine, towards the point I visited on the previous day with Bruce. There were quantities of large brick-red butterflies, which we chased for more than an hour without even nearly catching one—so swift and jiggery was their aimless flight. They were most of them flirting in couples, and would dart into the air, plunge down towards the glacier, or fly away over the fields in wayward happiness.

As we were returning through the fields to camp, a man rushed frantically amongst the growing corn and seized two kids. He broke their backs, one after another, and cast the carcasses on to the path. His act was seen by the owner of the kids, a peasant belonging to the next village, who cried aloud and summoned his friends. In

a few moments the population of both villages came together and drew up opposite each other, gesticulating and shouting in great anger. A peasant war seemed on the point of breaking out. We thus had experience of the moods to which the villages of these parts owe their strong battlemented walls.

Towards evening our messenger returned from Hunza, whither we had despatched him to beg for sugar and salt. Captain Bradshaw sent us all his remaining store, but he was without either salt or tobacco. He also sent three negatives of views from Hunza, which unfortunately arrived in time to go with the Gilgit baggage, and so were lost.*

June 29th.—Our proposed early start was postponed because of heavy rain which fell about the time of sunrise. Moreover, there were all our accounts to be settled with the natives, and some packing still to be finished, so that it was 7.30 a.m. when we left the village behind. The four things one has to pay for are flour, *ghi* (clarified and usually rancid butter), wood, and milk. One seer (2 lbs.) of flour a day, and two ounces of *ghi* for each of the sepoys and native servants, and the other things for the mess in varying quantity. But, heavens! the struggles involved in making up the accounts, when every addition has to be done on the fingers, and every division is an insoluble enigma even to the Raja's Munshi, who was supposed to be a medium for adjusting accounts between us and the villagers.

"Well, what have I to pay for?"

"There is *dud*, *atar*, *ghi*—yes, and there is wood, too."

"How much *atar*?"

The Munshi, looking hopeless—"Oh! you have had *atar*; let us say for ten rupees."

"Nonsense! How much? How many seers?"

"Why, *hazor*, these are poor people, and have little *atar*; let us say eight rupees!"

* The following were found at Hobar:—*Glauz maritima*, *Parnassia ovata*, *Silene conoidea*, *Gentiana detonsa*.

Habiba and the Gurkhas are called, and inform me of the exact number of seers each has had. Eleven seers for us, twenty-four for the Gurkhas, thirty-three to carry away.

"Yes, that is quite right," says the Munshi.

"But that is not worth eight rupees."

"Well, how much does it come to, *hazor*? Tell me, for I do not know." And so on.

"Now how many seers of milk?"

"Well, the Khansama knows; how many would you say?"

"Fifteen."

"All right; fifteen is right."

And so the bill is added up, and then they want a little added on for luck, and then a little more so that the total may be easily divided by three—I suppose for the three lambadhars. Ultimately every one is satisfied, and off we go.

We retrace our steps of yesterday afternoon to Holshal and the fort; then plunge down the zigzag path to the foot of the moraine precipice, and thus reach the wide expanse of concentric smaller moraines that intervene between the great one and the glacier. Here I encountered a very stupid or very frightened native, and began to cross-examine him about local names.

"What do you call that valley?"

"I have no tongue."

"That valley—is it Bualtar?"

"Ah! Bualtar."

"And that hill—is it Shaltar?"

"Ah! Shaltar—Shaltar i Chish."

"Good! now that village—what's its name?"

"Ah! village."

"No. Begin again. The name of that is Bualtar?"

"Ah! Bualtar."

"And that Shaltar?"

"Ah! Shaltar."

"And that village—what is it?"

“Ah! village.”

After about twenty minutes of this kind of examination I discovered that the village was called Shaltar, and the mountain Shaltar mountain, which I might have guessed to start with. There was no distant view anywhere, thanks to the heavy clouds; but if there had been, every hill would have been just Chish, or the Chish of the nearest village or pasture.

We struck straight across the glacier, which is much moraine-covered at this point and easily traversed, the only difficulty being to find a way off through two or three seracs at the far side (9,000 feet). There we found an obviously ancient track, which led us first up the right bank of the glacier, and then into the moraine chaos which fills the obtuse angle between the Hopar glacier and the foot of the Barpu glacier. It is clear that the main features of this wild region of piled stones were formed centuries ago, and have not been much modified by the smaller glacial changes of recent years.*

In due time we entered the level valley bottom intervening between the left moraine of the Barpu glacier and the hillside; we followed this trench for the remainder of our way. Sometimes its bottom was broad, level, and green; sometimes it was narrow and stony. Now it expanded into lake-basins, filled with water at the melting of the snows, but dank and muddy for the rest of the year. Again it was covered with bushes of wild-rose in full blossom, mixed with the almost olive-green Bik (*Salix oxycarpa*) shrub,† the stream winding amongst them; and big stones here and there showing above

* It should be mentioned that the supply of ice which now comes down the Barpu glacier only just suffices to carry the snout of it against the side of the Bualtar glacier. The two ice-streams do not really join, and if there were to be any further shrinkage the Barpu glacier would retreat up its own valley, and would become visibly separated from the Hopar glacier system, as that has become separated from the Hispar.

† These plants were found along the right bank of the Barpu glacier:—*Erigeron andryaloides*, *Orchis latifolia*, *Ranunculus hyberboreus* var. *natans*, *Hippuris vulgaris*, *Euphrasia officinalis*.

the foliage. On the one hand was always the bare hillside, on the other the bare moraine. Clouds hid every trace of distant view in front and behind. Not content with this odious function, they presently poured rain upon our heads, and drenched us to the skin. In such condition we arrived at our camping-ground, situated at the base of some steep rocks, edged with blossoming rose-bushes, and by the side of an open maidan which here intervened between the rock wall and the moraine. We called the place Wild Rose Camp (10,400 feet). All the grass land in this Barpu trough is the Raja of Nagyr's alp, and hither in the summer time he sends his horses, bullocks, and goats to graze.

Zurbriggen and I sheltered from the rain in a cleft of the rocks, awaiting the coming of the coolies and tents. A better ledge offering itself a few feet higher up, Zurbriggen climbed there, and was almost knocked down by a big bird which flew in his face. It was a hen chukor (*Caccabis chukor*) that he disturbed from her nest. We found thirteen hard-set eggs in the rough straw cup. In due time camp was pitched beside a spring of clear water, and the rain, finding it could harm us no more, presently ceased to fall. As the evening came on the sky cleared, and a magnificent sunset made amends for our past discomforts. Up and down and across the valley grand mountains revealed themselves. The southward extension of the Golden Parri was ahead of us; the big peaks of the Chogo Lumba and Khaltar watersheds showed their summits over the crests of their imposing buttresses, which extended down towards us, enclosing the basins of snow which feed the Barpu glacier. Far away to the west, a foundation for the glorious sky, were the massive mountains of Budlas, daily gatherers of cloud. It was certainly the finest sunset we had yet seen, and as grand as any I ever saw over alp, desert, or ocean, but for colour it was inferior to the sunsets of the Alps.

June 30th.—About 7.30, on a glorious morning, McCor-

mick, Zurbriggen, and I left the cold shadow of our wall of rock and commenced ascending northwards towards the crest of the ridge, called Rash, which separated us from the Hispar valley. The ascent was steep and stony, but we reached the top in about an hour, and were rewarded by an all but perfectly clear view. The watershed to the south now displayed almost its whole extent from the Crown of Dirran to the Chogo peak, and we were enabled to reconnoitre the peak between them which we came up this valley to climb.

We used to speak of it as the Saddle peak. On the other side we looked up the long, dull Hispar valley, and could see the straight row of peaks north of it standing up like spikes on the top of a wall. Some of them are individually fine, but collectively they produce the poorest impression.

After spending an hour or so in work at this point we followed the crest of our ridge, and mounted for another



SUNSET FROM WILD ROSE CAMP.

1,800 feet to a knoll some 3,000 feet above Wild Rose Camp. The view from it was similar to the one just seen, but rather more extensive, the great peaks to the south being better displayed. Moreover the glacier below was visible in greater extent, and we could follow it from its rise in the Saddle peak to the point where it abuts against the Bualtar glacier. It is, throughout, as noble an ice-stream as one might wish to see, bending with all imaginable grace. For some time it has been in retreat,

but it will presently advance, for in the neighbourhood of our camp, and higher up, it is bulging over its lateral moraines, sending continual small ice-avalanches down their outer sides, and in more than one place attempting to thrust out an arm into the Raja's alp. We spent a delightful hour on this highest point of our morning's excursion, and then raced down a slope of loose stuff in twenty-five minutes to the side of the glacier, by which we walked for a mile or more to camp and tiffin.*

July 1st.—After a night that was far too warm (min. 47°) came a dull morning and visible threatenings of rain. There were compensations, however, in the coolness of the air and the absence of a burning sun. Various accounts had to be settled and arrangements made, kiltas to be sent off to Hispar, and the like, before we could start on our day's march. At 7.30 we were off, and for an hour and a half we walked straight up the valley between the moraine and the hillside, till we approached the point where they meet. Before that meeting takes place the valley opens out into a charming little plain of sand dotted over with numerous rugged *Bik* trees, looking for all the world like olives. This is called Paipering Maidan (10,990 feet), and here we turned to the right up the moraine-slope and took to the ice. We were opposite the point where the two main tributaries of the Barpu glacier unite. One of them comes down the Samaiyar Bar from the Golden Parri. The other, which is the larger of the two, descends from the Khaltar watershed, and, sweeping back to the west at its head, rests against a transverse ridge dividing it from the highest level of the Bualtar glacier. Our route lay up the latter of these branches, locally known as the Shallihuru glacier, a name which the natives could not explain. *Huru* must clearly

* The following were found on the crest of Rash ridge (c. 18,400 feet):—*Malcolmia africana*, *Sedum tibeticum*, *Macrotomia perennis*, *Pedicularis pycnantha*, *Ephedra monosperma* or *E. Gerardiana* var. *Wallichiana*, *Veronica biloba*, *Thymus Serpyllum*, *Dracocephalum* near *D. palmatum*, *Androsace villosa*, *Thlaspi alpestre*, *Echinospermum barbatum*

have some meaning, for it is the designation of the first village up the Hispar valley. The ridge dividing the Shallihuru from the Samaiyar Bar glacier is called Awkbassa.

We did not at once cross the united glacier, but struck almost straight up the middle of the Shallihuru branch under the precipices of Awkbassa. We had much medial moraine to

cross before we trod upon the undulating ice, which stretched away before us to the foot of the great ice-fall we were destined to make intimate acquaintance with. Zurbriggen piloted the coolies over the region, so strange to them, whilst Roudebush and I remained far behind, busy with such surveying as the thick atmosphere allowed.



ON THE BARPU GLACIER.

We ran after the others later on, and, bearing to the right, entered the region of seracs. We crossed some of these and came to a giddy short cut, which Roudebush preferred to circumvent by following the route of the coolies. After passing the narrow passage, I was about to tread on a broad mass of ice which bridged a chasm, and over which the caravan

went a few minutes before, when I heard what seemed to be a shrill whistle in Roudebush's neighbourhood. I paused, and at that instant the mass of ice I was going to have stepped on cracked up and tumbled into the crevasse it had bridged, making thunder in its descent. I sent Roudebush's coolie and a Gurkha to see what he wanted and show him the route; they found him half way down a crevasse into which he had been knocked by a sliding stone. He was caught with a shoulder against one side and a knee against the other, and was thus suspended about twenty feet above a rushing torrent of water, close to a moulin. He could not extricate himself, but they pulled him out by aid of the coolie's long shawl. He lost his hat and stick, but was not hurt. He did not whistle, but shouted. I certainly heard no shouts.

We now made for the left bank of the glacier, and struck it where a good path led over it into the trough behind. Here are situated the goatherds' huts, named Mir, close to the upper end of a considerable pool of water. We left them behind us and mounted the moraine valley for fifteen minutes to an admirable camping-ground (11,630 feet), where there was a streamlet of clear water flowing out of a pretty pool, the hill-slope behind being bright with flowers, and dotted over with wild-rose and other bushes. Not far off were a few stunted trees, but high up on the slopes of Awkbassa, caught as it were amongst precipices, there were many well-grown trees. We noticed, on the highest point which we reached of the Rash ridge, the dead roots of several considerable trees, so that clearly many barren slopes in these parts might be afforested, to the great benefit of the country, if attention were given to the matter. Now trees only exist on slopes inaccessible to the natives; all others having been cut down. As in so many mountain regions, the inhabitants have themselves to thank for a scarcity of timber which causes them much discomfort.

On our arrival we found camp pitched and a fire lit, so that tiffin could not be far off. It was just noon. The

rain had thus far considerably held off, but it now began to descend in a steady stream, and continued to pour, with more or less persistence. Towards sunset it cleared up, and the mountains gradually cast off their shrouds and stood out like pallid ghosts, when the cold light of the moon supplanted the last rays of day. The Saddle peak at the glacier's head resembled the ghost of a bride, trailing her white veil over the snowfield. It was pleasant to be relieved from our cloud prison even thus late, but the aspect of the heavens was not promising, and, though I packed and made all arrangements for an early start next morning, I turned in, fully assured that a long night's sleep and a day of writing and drawing in camp were in store for me.

July 2nd. — My confidence was not ill-placed. The night soon



MIR CAMP.

clouded over again, and by two in the morning rain was once more falling. Our proposed expedition up the glacier had to be postponed, as indeed the state of Zurbriggen's eye would in any case have necessitated. The previous day, while he was nailing boots, or doing the like work, some metal splinters leapt into his right eye. He removed three of them, but one remained under the lid and tormented him all night. If, now and again, he chanced to fall asleep, it was only to dream of going to doctors, who failed to cure him of his pain. "*Donnerwetter!*" he cried to them in turn; "what sort of a *charogne* doctor are you?" and thereupon awoke to fresh torments. In the morning

his eye was badly swollen, but, with the help of daylight, I was able to find the offending mote, high up under the lid, and to extract it, whereupon the pain ceased, and our guide began to be himself again.

What a miserable day it was outside the tents, to be sure ! But the rest and the rare leisure were delightful. If only our larder had been better stocked ! Flour was giving out, and the Raja of Nagyr sent a letter saying that there was none to be had there. The bottom of the tin was visible through our last spoonful of salt. We had at the outside sugar enough for two days, and but six pipes of tobacco. Such was our condition when a *dik wala* was seen approaching with a box upon his back. "Stores from Gilgit !" was the immediate cry ; nor were we disappointed. We prised the box open, and found untold treasures sent us by the admirable Roberts, whom we fell to blessing in all the languages—salt, lots of it—sugar, a whole bag—tobacco—and, great Scott ! jam ! The rain might go on falling, we rather liked it—we could smoke, we were independent of external miseries. Heavens ! how we dined ! Then I turned in and read "*Les Trois Mousquetaires*," and listened, not without a tinge of satisfaction, to the rain steadily pattering on the roof of my tent. It was the first half-holiday I took since leaving Abbottabad.





CHOGO AND SADDLE PEAKS FROM DASSKARAM NEEDLE.

CHAPTER XV.

MIR TO HISPAL.

July 3rd.—The continuing bad weather prevented our starting for a climb, so I prolonged my holiday. I lay upon the ground and did nothing, listened to the rain and watched the drifting clouds. It was delightful. Towards evening there was a breaking overhead, and the sunset was fine, though not comparable to the sunsets of the Alps. We never saw either the deep gold or brilliant rose which one expects from a snow mountain in the evening. The sky became gloriously clear, and a bright moon silvered all the peaks and slopes at the valley's head, and struck dark belts of shadow across the great glacier and its cataract of ice.*

* Found at Mir:—*Cerastium trigynum*, *Anaphalis nubigena*, *Ranunculus hyperboreus* var. *natans*, *Potamogeton pectinatus*, *Stellaria Webbiana*, *Gentiana argentea*, *Thymus Serpyllum*, *Polygonum affine*, *Hedysarum Falconeri*.

Early, therefore, and hopefully we retired to our bags for the night.

July 4th.—At last the weather promised well. The night was fairly cold, and things actually on the ground were frozen, though the thermometer four feet above it only registered a minimum of 34° Fahr. Zurbriggen and I, with Harkbir, Karbir, and five coolies, accordingly started away at 6 a.m. and walked alongside the glacier's left moraine. The route soon became very rough, and in some places bad. We had to cross below and over the foot of the steep little Mir glacier, and after that several couloirs in succession, all of them descending from the jagged mass of the Dasskaram Needles. About seven o'clock we heard the voice of a cuckoo far above us. Several times we passed broods of young birds of various sorts, especially chukor. The old birds were calling on all sides.

The great glacier to our left was in many places invading its moraine. We were thus forced up the hill to the right, and had to cross several steep places where the footing was none of the best. Here the coolies went fairly well, but when they had to traverse the snow couloirs, three of them went abominably, and that notwithstanding the huge steps cut for them. One was so unutterably stupid as calmly to tread on the slope instead of in a step the size of a joint-dish. Down, of course, he went, with his kilta rattling about him—fortunately not the one containing the instruments. They made straight for a big crevasse, and we thought they were done for, but a hump of snow turned them aside and they landed comfortably in a small one. Meanwhile two of the other coolies sat down on the snow and cried like children, boo-hooing aloud. After this incident they all went more carefully, and we had less trouble with them.

We mounted close beside the icefall, the most complete chaos of jumbled blocks it was ever my chance to behold. Its entire height is about 4,000 feet, and at no point was it possible to find a way through it. At 10.30 we at last got the coolies to the place where it is neces-

sary to take to the ice if one is to advance further. Here the Dasskaram glacier comes down a steep gully from the right, and the crags of a ridge from the highest Dasskaram needle abut vertically against the left bank of the Shallihuru icefall. Obviously the wretched coolies could no further go, so we ordered camp to be pitched. To find a place for it was not easy, for the slopes were all raked by continual falls of stones, besides being everywhere too steep for a tent. At length a tolerable spot was found at the foot of a sheltering rock wall, and there the men proceeded to build a tent platform (13,960 feet). I admired the skill with which they made, of the rough stones lying about, a strong wall to support the platform. They built up a place for the Gurkhas' tent, and dug a hole for themselves.



SHALLIHURU SERACS.

These traces of our presence will doubtless remain for many years, and the story of our journey is not likely to lose much by the coolies' telling.

After Zurbriggen and I had lunched, he went off with the Gurkhas to find a way through the seracs, while I set to work in the tent. I observed the instruments, set up the plane-table and sketched in the surroundings, catalogued and labelled the objects collected on the march,* and

* These were found along the moraine between Mir and Dasskaram Camp:—*Sedum asiaticum*, *Astragalus frigidus*, *Potentilla argrophylla*.

took a sphygmograph tracing of my pulse, not without a good deal of difficulty.

During all the day the cloud phenomena were singularly interesting. In the early morning umbrella clouds, usually prophets of bad weather, formed on the highest peaks of the watershed, but they dispersed without damage. Later, a strange haze overspread all the sky at a height of from



LOOKING DOWN THE SHALLIHURU GLACIER FROM THE SERACS.

22,000 to 23,000 feet. This haze I observed locally before, at about the same altitude, but not so widely distributed. It was a glaring haze, that seemed to multiply the intensity of the sun's heat. By degrees it thickened into cloud and, over Hispar way, great cumuli, in ascending air currents, began to mount into the heavens, their level bases being at about 18,000 feet, and their summits reaching from 7,000 to 10,000 feet higher. At 1.15 p.m. a little hail or snow fell on our camp. At 2.30 the whole sky was com-

pletely overcast, and the weather was threatening, but presently the south wind began to fail before a dry current from the north. The cloud mantle of the heavens was rent in various places, and towards evening every shred of it was carried away.

After my work was done I lay for an hour on the tent floor, sometimes dozing, sometimes listening to the hum of the rushing glacier stream and the tinkle of the little brook that passed close to the tent door. There was always the crash and boom of falling stones, near at hand or far away. The thunder of tumbling ice in the icefall resounded every few moments. I could also hear the click of Zurbriggen's axe, though unable to see him on the glacier.

About four o'clock he returned with unwelcome intelligence of defeat. There was our intended peak clearly visible from base to summit at the head of the snowfield before us. Once on the névé basin no difficulty barred our way. We had but to climb an easy ridge to the pommel, follow the crest of the saddle, and pound our way up a gentle snow arête to the top. About three miles of broken glacier separated us from the névé basin, but through all of it we saw a way if once we could reach the middle of the glacier. We were separated from that by a fringe of horribly broken ice, and it was in this fringe that Zurbriggen was working all the afternoon. He described it in the strongest language he could muster up, and his expressions are not usually lacking in force. Nowhere in the Alps did he ever behold the like. It was not merely crevassed, but pounded into round loose lumps of ice, wedged anyhow in the jaws of vast abysses, and overhung by tottering masses. The whole thing was loose and trembling. If a fall occurred a hundred yards off, the ice under Zurbriggen's feet shook about with the vibration. This kind of thing extended up and down for some couple of thousand feet, and in its narrowest part was a quarter of a mile wide. It was frankly impassable, even at this time of year, when considerable beds of winter snow remained to bind it together. Later

in the season it might become even more impracticable. Our proposed expedition therefore had to be abandoned.

We often asked ourselves why it is that the Karakoram glaciers are so much more crevassed than those of the Alps. They are not on the average steeper. Even when they are almost level their surfaces are fissured like an icefall, and their true icefalls are simple chaos. The reason, I imagine, must be sought in the nature of their



IN THE SHALLIHURU SERACS.

beds. Throughout all our journey we observed the rarity of *roches moutonnées*. The vertical stratification of the rocks all over this country makes the formation of *roches moutonnées* unusual. A glacier moving over such rocks does not round and polish them, but simply snaps off their edges. The beds of all the glaciers I surveyed are formed of the successive edges of strata set up on end. Over these the ice has to force its hampered way, and in doing so it gets split up. The peculiarity is a most unfortunate one for a

mountaineer. The glaciers which run along the strike of the strata are not so contorted.

July 5th.—At an early hour the sky was again overcast, and so, having no plan, we awaited the dawn to see what kind of weather might be expected. Matters improving, we packed up our tents and kiltas and sent them down with the coolies to Mir Camp, we ourselves with the two Gurkhas starting at 6.45 up the left moraine of the steep Dasskaram glacier to make an exploration into the hidden recesses above. There was a stiff scramble up the loose stones for nearly an hour, and then, as clouds threatened to gather, we halted to set up the plane-table and draw in the upper basin of the Shallihuru glacier which now lay at our feet. We turned upwards again, not well knowing whither, but vaguely tending towards the col at the glacier's head. The glacier is nowhere anything but narrow, and is entirely fed by the avalanches which pour upon it from the steep walls and down the couloirs around it. We reached the branching of the first couloir to our right and climbed up beside it for a short distance, then crossed it and mounted to the back of the rib of rock on its further (or true right) side.

This committed us to our course. Once on this arête, there was nothing to do but to follow it, for on one side it was vertical, and on the other extremely steep. The strata were of course upright, and the *laminæ* very sharp, so that we had to advance with care, for the least slip would cut one to pieces. It was like climbing on knife edges. There was much fresh snow among the slaty rock, but everywhere good footing could ultimately be found. Up we went along the steep arête, now climbing over a pinnacle, now traversing a saddle, now descending into a gap, the abysses always on either hand. It was a good scramble, and became harder the higher we went. If only we had started earlier! The great aiguille was not so far off, perhaps we might still reach it, late as it was—but no! Just after noon ill-luck again awaited us behind a corner,

and carried off Zurbriggen's axe; down it rattled into the couloir on our right, and mine was the only axe left in the party. The Gurkhas had none with them; two of theirs were broken at Bagrot, and the other two were gone with Bruce over the Nushik La! Need was, therefore, for us to be content with less than the highest. We were close to the top of one of the needles, and at a quarter to one o'clock we stood on its summit.*

All the Shallihuru glacier, with the great peaks around its head, was displayed, and we could see, away to the north, range after range of mighty mountains, with which future marches were to make us better acquainted. I was disturbed from my reveries by the cry of "Ibex! Ibex!" I turned and beheld four of them looking surprisingly big, especially one great doe attended by a nimble young one. They stood on the rocks about 300 yards off and watched us with apparent surprise. Ultimately they concluded to leave the neighbourhood, and thereupon started to cross a wall of the mountain which was heavily encumbered with snow in a dangerously loose condition. It was most interesting to watch their clever manœuvres, and to see how carefully they avoided cutting a furrow across the snow. They jumped from spot to spot, taking advantage of every rock that protruded through the surface. Now they would go straight uphill and now straight down to secure a safer passage. The little one was hard pressed to get across. Its mother watched it over the worst part and then composedly went on her way. One hard place stopped the kid for about a quarter of an hour and almost ended its career, for in its desperate struggles it started an avalanche from which it barely escaped. Ultimately all reached less steep ground, and, passing round a corner, were lost to view.

We stopped an hour and a half on the top and enjoyed

* The following were found on Dasskaram Needle up to 16,500 feet:—*Sedum tibeticum*, *Parrya exscapa*, *Astragalus confertus*, *Leontopodium alpinum*, *Cheiranthus himalaicus*. At 17,000 feet we found *Saxifraga oppositifolia* and *Potentilla Inglisii*.

every moment of our repose. The altitude of our needle is 17,660 feet. The descent to the foot of the difficult part of the arête took us two hours and a quarter, and was most delightful and interesting. There Zurbriggen left us, and, going into the couloir, mounted it for an hour and recovered his beloved axe, the loss of which he had not ceased to bemoan. We went leisurely down, catching on our way a brood of young chukor, which we presently liberated. In thirty-five minutes we reached the tent platform, and Zurbriggen caught us up. How enjoyable was our rest there, and the pipes we smoked! We were in a humour in which it was easy to forgive, and we even ceased to revile the icefall that barred us from the Saddle peak of our disappointment. I suppose we must have halted an hour at this spot: when we turned to descend the sun was already low and the shadows were climbing the snowy flanks of Awkbassa. We were delayed by no slow coolies, and our packs were light; we did not linger on the road. Rapidly we retraced the steps of the preceding day, and, in an hour and thirty-five minutes, regained the camp at Mir, where not only were McCormick and Roudebush awaiting us, with dinner ready cooked, but the incomparable Rahim Ali, newly come up from Gilgit, with I know not what luxuries of stores in his kiltas. He also brought a letter from Roberts telling me that he was unable to carry out his plan of accompanying us over the Hispar pass. A reference to an old diary shows me that, curiously enough, exactly that day fourteen years before, Roberts was prevented from starting with me for a climbing trip in the Alps.

There was one point of interest in connection with the climb which has not been mentioned. I made myself during the day the subject of experiment in the matter of food. The chief difficulty in any great ascent, requiring two or three days, is carriage. Food is the heavy item. If one could lay in a good foundation before starting in the morning, that would help; but few men can eat a heavy

meal at 3 a.m. On this occasion my breakfast consisted of two *chapattis* and a piece of chocolate. I carried for the day seven small Kola biscuits* and two fingers of chocolate, and was surprised to find that this was even more than was needed. I did not suffer from hunger nor from faintness, and arrived in camp without headache or any of the troubles of digestion which arise so readily at high altitudes. In the evening I ate only a moderate meal, slept well, and awoke next morning in perfect condition.

July 6th.—The weather this day was magnificent. A strong north wind blew and carried the light snow in white streamers off all the sharper peaks. It was hard to remember that, but for a short bit of icefall, this perfect day would have been granted to us for the ascent of the Saddle peak. Mere existence became, however, delightful at whatever altitude and with almost any occupation. McCormick spent the morning stalking butterflies. Roudebush whiled it away, blowing on a hideous cacophonical instrument of his own construction: at its best it might have been about half as melodious as a jew's-harp, but, like the rest of us, it failed to attain its ideal. Zurbriggen got out the tools and mended things, whilst I was immersed in filthy lucre, paying all manner of persons infinitesimally small sums for their various more or less inefficient services. There was, moreover, much writing and cataloguing to be done, and so the morning passed.

At three in the afternoon we struck camp and turned our backs on the pretty pool and its croaking frogs. We retraced our steps to Paipering Maidan (10,990 feet), which it took the coolies an hour and a half to reach. The effects of light on the mountains, especially on the Hunza peaks, the wonderful blueness that pervaded the air and enriched the shadows, the foreground of white glacier like a turbid sea, all combined to produce a delightful series of pictures,

* Kola biscuits are manufactured at Marseilles, and can be obtained at Silver's.



COOLIES ON THE SHALLIHURU GLACIER.

amidst which I wandered in delight. Our camping-ground was a charming flat lake-basin, dotted over with *Gamun* plants for grass, shaded by stunted *Bik* trees, and embellished with wild rose-bushes and the pretty flowering shrub called *Bashkar*.*

We pitched our tents under a clump of Biks. The coolies scattered themselves in three groups around camp fires. The servants, with their tent, formed another group, whilst our attendant local authorities — munshi, two lambadhars, and a few miscellaneous followers of theirs — lit a separate fire for themselves, as also did the Gurkhas. When night came on, and the Hunza peaks were cut out in dark silhouette against the west, the bright fires, illuminating the quaint groups squatting about them, produced the most picturesque effects. To watch these and the moonlight was our evening entertainment, but the chilly air cooled our ardour, and drove us in early for the night. The sougning of the wind amongst trees was the unwonted sound that mingled with my opening dreams.

July 7th.—We separated at starting from our pleasant camp, Roudebush with most of the men going down the valley a short distance and then turning to the right and crossing the Rash ridge at a lower point (10,930 feet); McCormick, Zurbriggen, and I going up the valley and over the same ridge higher up. All started at 5.45 a.m. We followed a path between the moraine and the hillside for about half an hour, and then struck to the left up some good cow-made zigzags which we noticed on the previous day. The hill was of gentle slope and covered with vegetation. It was pleasant to ascend, but somewhat monotonous. Now and again, bearing gradually to our right, we had to cross slopes of large stone *débris*, but usually the ground was dotted with herbs doing duty for grass, and flowers were plentiful though of few kinds. There are scattered trees on the hillside, and the whole

* Found at Paipering Maidan :—*Artemisia sacrorum* (Gamun), *Lonicera microphylla* (Bashkar), *Salix oxycarpa* (Bik), *Rosa macrophylla* (Shau).

might be afforested. As we ascended, the view behind us continually developed. We were evidently about to enjoy a marvellous prospect. The point we were making for is splendidly situated, as was foreseen, and I looked forward to the most illuminating topographical revelations. About 300 feet below the crest of the ridge is a level plateau (15,630 feet), where we halted to lunch and rest our five coolies, who, lightly burdened though they were, showed signs of fatigue.*



LOOKING UP THE SAMAIYAR BAR GLACIER FROM THE SOUTH SLOPE OF RASH RIDGE

The whole range south of the Hunza valley was now displayed before us, from Rakipushi at one end to the Chogo peak at the other. There was not a cloud in any direction, unless a peculiar transparent haze, rising like a pillar near

* Found on the southward slope leading to the upper Rash pass:—*Berberis vulgaris*, *Echinosperrum barbatum*, *Pedicularis pycnantha*, *Lychnis brachypetala*, *Thesium himalense*, *Lonicera glauca*, *Primula purpurea*, *Saxifraga flagellaris*, *Draba incompta*, *Draba glacialis*, *Braya rosea*, *Saussurea* (?), and *Juniperus pseudosabina*.

Rakipushi, should be so described. We noticed it there on several occasions. It resembled a dust cloud, and was doubtless caused by some continuing fall of stones in the recesses of the hills. Was Pushi going "Boom! boom!" again for Raki dead?

We reached our plateau at 10.30. McCormick and I remained there for two hours and a quarter, taking a round of angles with the theodolite and working at the plane-table, whilst Zurbriggen went on with the coolies to find a good camping-ground on the other side. What a

view it was, to be sure! Each mountain manifested all the dignity of its form, and rose above us in the full majesty of its vast dimensions. The only drawback was the blazing heat of the sun. I felt it the more keenly, as I was foolish enough



RAKIPUSHI RANGE FROM NEAR THE UPPER RASH PASS

to send away my pith helmet with the coolies, a pith helmet and a theodolite being an inconvenient combination.

When we started away from our plateau we bore considerably to the right and entered a high, broad valley or trough, which here traverses the wide back of the ridge. In the midst of this trough is a lake, still covered, when we passed it, with a thick coat of ice and a mantle of melting snow. A gentle slope behind led to the ridge (three-quarters of an hour from plateau; height 15,930 feet), and there a new view burst upon our gaze. Rakipushi was still in sight on our extreme left, then all the Budlas

and Hunza peaks, and the long avenue of great mountains that border the Hispar valley. The sun shone straight on these Hispar peaks and made them look flat and uninteresting. We set up the instruments, but the heat was too great for work. The ground was bad, and it was only with infinite patience that I got the theodolite level; then my admirable Gurkha, Harkbir, accidentally kicked one of the legs, and the work had all to be done again. I began to feel pains in the head and back. So, to avoid worse troubles, we hurried into the shade of a great rock and rested under it for an hour or more. We saw Zurbriggen and the coolies far below, and were horrified to observe them bearing to the left instead of well to the right. This error on their part bore horrible fruit next day.

As the sun went slowly to the west the view in that direction waxed in beauty. The dry air, perhaps filled with fine dust, caught a rich blue glow and painted all the valley depths and shadows with its lovely tint. The mountains, far away, became like transparent crystals against the sky. We saw the fertile fields and slopes of both Hunza and Nagyr, and discovered the towns themselves, with the castles that crown them, nestling at the foot of the great mountains.

After two hours and a quarter spent on this col we packed up our things and commenced the descent, following, perforce, the direction taken by Zurbriggen and the coolies. We went down piles of big stones and a steep damp slope of rank herbage, below which there was a pleasant alp grazed by cattle and goats. The sun had greatly fatigued us, and made the descent seem endless. But, after an hour and a half of walking, we rounded a fold of the hillside and saw below the shepherds' huts, named Rash (12,140 feet), and, near them, our camp pitched and a fire blazing. A few moments later we were sheltering in the tent from the still burning sun, and Zurbriggen was serving us with tea and other acceptable comforts. He was not at all happy in the bottom of his heart at losing such

grand climbing weather, but his boots having finally given out, climbing was for the time impossible. "To be on the mountains is to me," he said, "an unspeakable delight; and then, besides, I like earning money."

As the sun departed, the glory in the west became indescribable, but it was a glory of the atmosphere, not of the peaks. Floods of golden or crimson light streamed through every pass and almost blotted out with their opaque brilliancy the peak beside each. From moment to moment the scene changed, but every change was a new revelation. At length night came on. The bright moonlight spread above us from a hidden source and silvered all the white hills across the valley. Satiated with so much loveliness we retired to rest. "Farewell, Selene, bright and fair; farewell, ye other stars that follow the wheels of quiet Night!"

July 8th.—The night was warm (min. 47° Fahr.), and the day opened with a burning sun. We were tired after our clamber of yesterday, and did not start till 8 a.m. We found ourselves, as we feared, still pushed to the left in our descent, so that almost all the advantage gained by crossing the ridge high up was lost. At first we went down steep grass; by degrees the herbage became rarer, and at length we entered a sloping desert of sand and stones. Finally we ran down a stone-shoot into mere Sahara, the valley bottom being barren as at Bunji, and the hillsides walls of stone, set up at an angle suitable to catch and concentrate the rays of the broiling sun on the unfortunate traveller between them. The descent to the river took one hour and ten minutes of very rapid going.

The intermittent track led us over a difficult *parri* by means of a steep slope, raked everywhere by falling stones. If one of these were to strike the traveller he would inevitably be precipitated into the raging torrent below. We hastened on our way as fast as the heat would allow, greatly aided by steps which Zurbriggen cut on his passage shortly before us. After three-quarters of an hour of this kind of thing we reached a bridge (8,620 feet) of two planks

spanning the violent river. Down I plumped and went over it on all fours—a proceeding which set McCormick and] Harkbir laughing so immoderately that they almost



A SAND GLISSADE.

tumbled off the path. Most of the remainder of our way lay up the right bank of the river. We passed through a patch of high grass jungle, diversified with rose-bushes in full blossom, and then we entered the stony desert again. We often rested under the shadow of great stones. At first the gorge was narrow and a trifle breezy, but presently it opened out and the heat became worse than ever.

The slopes on our left were

long, and reached unbroken to the crest of the ridge; those on our right were invisible above and precipitous below. The river boiled and thundered in flood, the exact colour of its sandy banks.

I remember little about the way. We passed through

a clump of miserable huts, called Arpi Harrar, where Roudebush and the others spent the night and left visible traces behind them. We halted for half an hour by two great rocks, with a lovely draught between them (temp. 83° Fahr.). Close at hand was a tiny fertile patch, all pink with roses. Thus far we had been two hours and a half walking from the bridge and one hour and a quarter resting.

Half an hour further on we were approaching the mouth of a deep narrow side nala, that crossed our path, when we heard a noise as of thunder, and beheld a vast black wave advancing down it at a rapid pace. Some glacier-lake had broken high above, and the waters were bringing down the hill. When we reached the edge of the nala the main mass of the stuff had gone by, and only a thick black stream of mud was rushing swiftly past. This became by degrees more liquid, until it was no longer mud, but black water. We waited for some time till the waters subsided and the coolies caught up with us. Harkbir found a way across the torrent by leaping from stone to stone, and we were about to follow him when Karbir, who was looking up the nala, shouted to us to come back. We obeyed with the nimblest feet, and were not more than out of the ditch when another huge mud-avalanche came sweeping down.

It was a horrid sight. The weight of the mud rolled masses of rock down the gully, turning them over and over like so many pebbles, and they dammed back the muddy torrent and kept it moving slowly but with accumulating volume. Each of the big rocks that formed the vanguard of this avalanche weighed many tons; the largest were about ten-foot cubes. The stuff that followed them filled the nala to a width of about forty and a depth of about fifteen feet. The thing moved down at a rate of perhaps seven miles an hour. When the front of the avalanche was gone, and the moving mass became shallower, the mixture was about half mud, half rocks, and flowed faster. Now and again a bigger rock than the average would bar the way; the mud would pile up behind it, and presently

sweep it on. Looking up the nala we saw the sides of it constantly falling in, and their ruins carried down. Half the river was blackened by the precipitation of so much mud into its brown waters, and went thundering along with added violence.



MUD-AVALANCHE.

Three times did the nala yield a frightful offspring of this kind, and each time it found a new exit into the main river below, and entirely changed the shape of its fan. The third avalanche was the largest of all,* and fortunately left a massive cause-

way of stones almost across the nala at our very feet. Some big fall must presently have taken place higher up and dammed back the

waters, for the stream ran almost dry, and we were enabled

* In "Proceedings" R. G. S., 1864 (p. 27), Colonel Godwin-Austen describes a mud-avalanche (*shwā*) which he saw near Kutzah (12,553 feet), south of the Skoro La, on the 29th or 30th of July, 1861. It was 30 yards wide and 15 feet deep.

to cross the gully without difficulty, coolies and all. The obstruction delayed us for two hours and three-quarters. In ten minutes we reached the second bridge (9,390 feet) over the Hispar torrent and traversed it to the left bank. Going very slowly we mounted in an hour to a fertile area.*

We entered it through sangars and by a watch-tower or small fort. The first group of fields is named Darapo. They are stony and badly cultivated, a great contrast to Hopar. A deep nala, that made the fan, divides Darapo from Hispar. In its bowels some half-dozen mills find a footing. The path goes round by these and mounts to the fairer fields of Hispar. A few steps led to the mud-roofed group of houses. We rounded a corner and beheld with satisfaction the camp pitched close at hand, on a shadeless but level field (10,320 feet). Alas! we were again down in the domain of flies; but the sun was already near its setting on our arrival at 6.45, and we could eat our dinner and retire to rest in peace.

* Between the two bridges in the Hispar valley there were found *Phragmites communis*, *Colutea arborescens*, *Cnicus arcensis*, and *Lactuca talarica*.



IN THE HISPAN VALLEY.



LOOKING UP THE HISPAR GLACIER FROM HAIGUTUM CAMP.

CHAPTER XVI.

HISPAR TO HAIGUTUM.

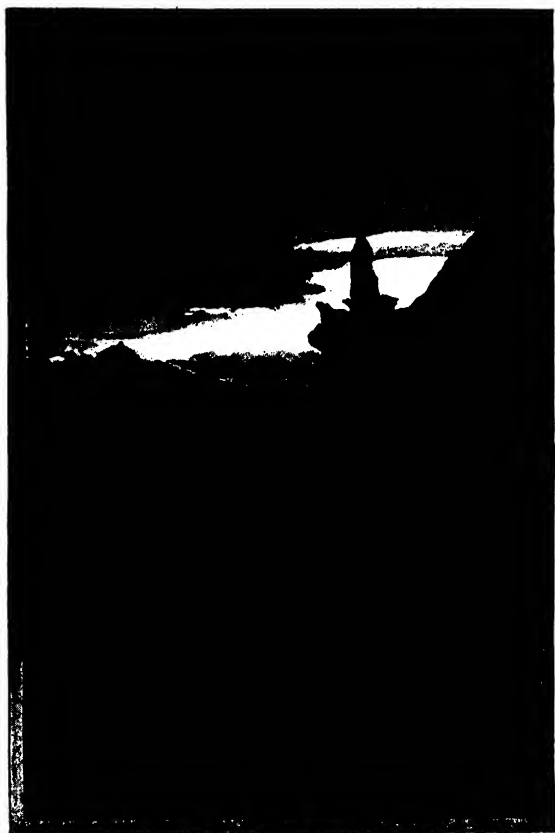
July 9th.—Whilst waiting by the mud-avalanche, the previous afternoon, I noticed two or three tiny flecks of cloud drifting across the sky from the southward. This morning a high southerly current carried with it a continuous stream of cirrus clear over the tops of the highest peaks. As the day advanced the fine silver threads lost their crispness and faded into one another, thus overcasting the sky more completely, but not perceptibly diminishing the burning heat of the sun, which, with the flies, made the tents intolerable. I spent the whole morning at my desk in great discomfort. The afternoon was also devoted to work; and, when evening came, I was tired out, and yet neither the correspondence nor the packing had been attended to. It was needful therefore to remain another day. We arrived at this conclusion reluctantly, not only because of the flies and the heat, but forasmuch as we were now without tobacco. We had to fall back on the horrible native stuff carried by the servants. McCormick and Roudebush retired to bed, smoking cigarettes of this filth rolled in thin

paper, which I shall always believe they found in the candle packets!

July 10th.—Zurbriggen and I were up and off at 5 a.m., he to try his luck with the rifle, I to work at the plane-table. The hill at the back of Hispar is called Shukurri, and its middle slopes afford good grazing for large flocks of sheep and goats.

Our intention was to climb about 3,000 feet to a point on its west arête, whence Zurbriggen hoped to reconnoitre game in the valley behind.

The sky was early overcast with a layer of high mist. All peaks of less altitude than 21,000 feet were clear beneath it. The effect was extraordinary and depressing. There was a sense of weight overhead. The air was soft and heavy. It



STONE-MAN ON SHUKURRI.

produced all the sensations that accompany an approaching thunderstorm. But the high mist never thickened into real cloud, and only sufficed to blot out the sunlight, so that the day, though close, was a pleasant one for exercise.

At my first halt Zurbriggen went his way. The day passed, as far as I was concerned, without incident. I reached four admirable stations in succession, and was

enabled to clear up my ideas about the geography of the district.* The side valley that opens behind Hispar was specially interesting to me. It contains an easy glacier, descending from a low col between the Golden Parri and the next mountain on the west. Over this col, had we known of its existence, we might easily and quickly have come, in one long day, from Paipering. Any mountaineer, approaching or leaving Hispar, would find this the most agreeable route, and would thereby avoid all the horrible desert valley.

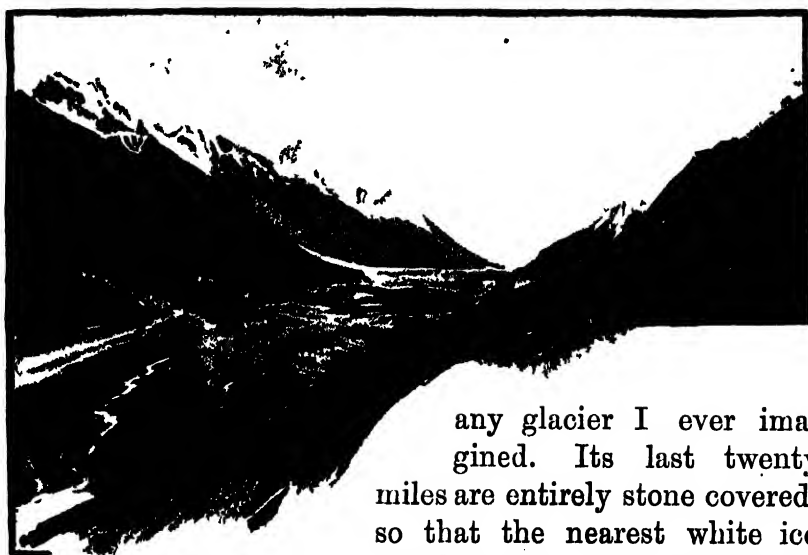
Of chief interest to me was the view up the great Hispar glacier towards our pass. From camp we could only see the broad stony foot of the ice, and above that, far away, a group of distant peaks. Right and left, indeed, there were the long ridges, bounding the abnormally straight valley, and singularly uninteresting from their monotony of form, one transverse ridge sticking out beyond another with perfect regularity. But from the high position now attained, I beheld the broad snow col itself and the long majestic glacier, descending all its forty miles in one grand sweep to my feet. The side peaks, too, with their many aiguilles, no longer looked monotonous or uniform. They were seen to be merely the buttresses of ridges: the successive attendants of a nameless aristocracy of peaks.

The all-enveloping cloud-shadow solemnised the scene, and emphasised the grand character which this view possesses above all others I have ever beheld. Not only could I clearly perceive the whole length and breadth of the mighty Hispar glacier and the perfect series of peaks bounding it on the north, but there were still more distant mountains peering over our pass from an excessive remoteness. And if I turned to the west and surveyed the region whence we had come, there were all the mountains of Budlas, far away as Chalt, and the Hunza peaks joining on

* The following were gathered on Shukurri:—*Macrotomia perennis*, *Bupleurum fulcatum* var. *nigrocarpum*, *Eritrichium strictum*, *Mertensia primuloides*.

to them, so that from west to east the great range was stretched out before me, peak beside peak, for a length of at least ninety miles. And it looked ninety miles. There was no doubt nor mistake about the scale of the thing. There was the glacier to measure by in one direction; in the other, the mountains were well known to us; we had seen them from close at hand, and learned to wonder at the grandeur of each alone.

After long gazing at the whole view the eye finally rested upon the glacier—so vast a thing; so much vaster than



LOOKING UP TOWARDS THE HISPAR
PASS FROM SHUKURRI.

any glacier I ever imagined. Its last twenty miles are entirely stone covered, so that the nearest white ice was far away. The whole surface looked level, and there were evidently no icefalls to be

surmounted. Many tributary glaciers swept round corners to join the main stream, but they appeared neither to add to its volume nor to disturb its tranquillity. There was nowhere any visible trace of life or man. It was a glimpse into a world that knows him not. Grand, solemn, unutterably lonely—such, under the soft grey light, the great Hispar glacier revealed itself.

I descended from my highest point in one hour to camp, running rapidly down loose slopes of stones and sand, which

in many places permitted a glissade. On the way I found some new flowers, and I missed many which had up to the present been common on all such hillsides. Butterflies were not numerous, save for the little blue sort which enlivened the whole hillside with its iridescent wings. I failed in my attempts to capture specimens, and could not find it in my heart to regret the failure; the tiny creatures were so fair. As I descended, the mist thickened in the

west, so as almost to blot out the distant peaks. The atmosphere might have been imported from the banks of the Thames, so utterly un-Alpine did it look. I reached camp at 11.30, in time for tiffin, and spent the remainder of the day making the necessary arrangements for our further journey.

July 11th.—The time was at last ripe for our starting to attempt the passage of the great pass. But when the morning came Zurbriggen was discovered to be temporarily indisposed, and our coolies had not arrived. I nevertheless determined to start, leaving Habiba and two men

to look after Zurbriggen. I called the village together and enlisted as many men as could be spared from the fields. There were, in all, eighteen, enough to carry the bulk of the baggage. The rest was left behind to be brought on by Zurbriggen. At 9 a.m. we were ready. I noticed two fresh individuals added to our company, and on inquiry it turned out that they were guides, one for the Nushik La, the other for the Hispar pass. The former



was an old man; the latter, Shah Murat by name, looked, though he was not, a competent kind of fellow. Short of stature, with long black hair, a large mouth, teeth that individually forced themselves on your notice, a prominent hooked nose, and keen eyes. He wore thick knickerbockers and pattis on his active legs, whilst his body was enveloped in a loose black European coat. He professed to be a Yeshkun of Hispar, and to know no language but his own. Roudebush would have it that he was a Russian Jew! He shouldered a couple of sheepskins, full of flour, and a warm blanket, and therewith was prepared to face the snowy regions for a fortnight or more. Baltistan, Yarkand, or Badakhshan—it was all one to him which way he went.

A quarter of an hour after leaving Hispar we reached and crossed a moraine, thus entering the basin (about one mile long by from a quarter to three-quarters of a mile wide) from which the glacier has retired comparatively recently. Such a small oscillation is of no importance, so that practically the Hispar glacier may be considered to have been stationary during the historic period, for the cultivated Hispar fan has been deposited since the main retreat of the ice. In half an hour more we were level with the glacier's foot and close to the black ice cave, from which the river flows. Here two well-marked paths divide. One leads immediately on to and across the glacier, and is used by cattle, sheep, and goats in their annual migration to the Bitermal and other north bank alps. The other is the way to the alps on the south bank. We followed the latter, though for the Hispar pass the Bitermal way would have been the better and more direct. I did not wish to divide the party before it was necessary to do so. In five minutes we came to a set of sangars, recently and strongly built of large stones. They contained cells for something more than a dozen sharpshooters, and entirely commanded the path, the glacier being on the one side, with a steep face that would require time to descend, and a precipice of rock on

the other. These sangars were doubtless built last year, when the Nagyr folk thought that they might be invaded by way of the Nushik, at the time the expedition was attacking Nilt.

In twenty minutes, walking sometimes on the stone-covered ice, sometimes by the side of it on places equally



ICE-CAVE OF THE HISPAN GLACIER.

stony, we came to the mouth of the Garum Bar (or Garum-bar Bar). There must be a glacier of considerable size in this nala, for the stream draining it is large. It is lost to view under the main glacier, as are all the other tributaries on both sides. We left the ice and took to the left bank, which was followed for the rest of the march

with only a few short intermissions. The sky was all day cloudy, for which mercy we were thankful, but now a strong wind began to blow up the valley, and with it came rain in large drops; but neither rain nor wind lasted long. We had to cross a number of stone shoots and fans down which the wind brought numberless missiles, which it was both necessary and amusing to dodge. "*Jaldi jao!*" cried our guide—like many a Tommy Atkins, it was all the Hindustani he knew—and *jaldi* we went.

In half an hour we reached a sheltered place under a small precipice between two gullies, and there a brief halt was made. The stone-shoots and the wind soon afterwards ceased. Our path traversed grassy declivities rich in flowers and butterflies, a crimson flower, a *hedysarum*, called *holchi* in these parts, being specially common, and spreading itself in masses over the lower slopes.* In an hour we reached a pleasant maidan, which seemed well suited for a halting-place, so there I set up the plane-table and awaited the coming of our caravan. In due time all the men arrived; a fire was lit, and tiffin was served. We made a long halt and thoroughly enjoyed the rest.

At three o'clock we started off again, and passed below a fine waterfall. Roudebush and McCormick, who went shortly before me, arrived at this point in time to see a fine avalanche come over the fall. Its white ruins were lying on the fan of old avalanche *débris* which we had to traverse. Shortly after we were over, another avalanche came down in sight of us all. A quarter of an hour later we crossed another nala, and then followed a good high path, in some places carefully and massively built up, across the slopes called Main Chiush. In favourable situations there were many rose-bushes in full blossom, and now and

* The following were gathered along the left bank of the Hispar glacier, between Hispar and Chokutens:—*Crepis flexuosa*, *Juncus membranaceus*, *Macrotomia endochromia*, *Tanacetum Senecionis*, *Spiræa hypericifolia*, *Sedum Ewersii*, *Cicer soongarica*, *Chrysanthemum Stoliczkai*, *Galium verum*, *Nepeta discolor*.

again a white hawthorn, here called *charu*. In three-quarters of an hour from the lunching-place we came to the opening of a considerable side-valley, which is extremely steep and filled with a splendid glacier. Its upper level is surrounded by ice-cliffs and aiguilles incredibly steep and sharp, whilst below, it descends in a steep icefall, divided into two parts at the foot by a protruding rock, resembling, for all the world, the Bies glacier above Randa.

At one point of the march I wanted to light my pipe, but had no match to set the filthy native tobacco smouldering. I appealed to one of our so-called guides, who swiftly supplied the deficiency. He picked up a hard stone with which to strike a spark from his knife, and he searched for and soon found a plant which he called *kapkinas*. It has large leaves like a dock, and the flower grows on a thick stem like rhubarb. He chose a dry dead stem and used it for tinder—a purpose which it admirably served.

Ten minutes beyond the stream from the steep glacier we came to some empty stone huts by a small maidan. This was the alp named Chokutens (11,770 feet)—the end of the first march. Our camp was already pitched, and we were glad enough to see it, for there was much work still to be done before the day closed.

Our position was very fine. Immediately behind us were the remarkable points at the head of the steep glacier. Right and left the great valley stretched away, its western end being still closed by the everlasting Budlas peaks, over which the setting sun nightly played wondrous effects. The range opposite was no longer the dull avenue it seemed when we looked along it from below, but broken up into grand mountain masses, one of especial majesty almost over against us, culminated in a peak upwards of 24,000 feet high. We could see it from base to summit, and observed, not without a tantalising emotion, that its south arête affords a practicable route to the summit. For expeditions of this kind, however, time, provisions, and boots failed us, so that we could only take note of the



LOOKING UP THE HISPAR GLACIER FROM ABOVE CHOKUTENS.

fact for future climbers and prepare to advance along the straight line of our march. When we sat down to dinner the sun was setting in great glory, and, as twilight approached and the flies ceased from troubling, a whistling, which we knew to be Zurbriggen's, came from the west. He presently appeared on the scene, restored to his usual health and glad to be with companions once more, after his few hours of unwelcome solitude.

July 12th.—Marching, as we did, thus far up the left bank of the glacier, there had been no opportunity of mapping the peaks and ridges immediately over our heads. Accordingly this morning I started shortly after 5 a.m. and spent a few hours on the glacier, crossing over nearly to its centre. It is a wonderful sight—everywhere swollen into great stone-covered mounds, broken by a black icy cliff here and there, and dotted with lakes. The thing is on so vast a scale that it takes time to realise its immensity. There were several areas of stony and earthy surface which had evidently remained undisturbed by crevasse convulsions for many years. Soil had formed, and grass and numerous plants had taken root and were flourishing. The stones that cover the glacier are practically all of one sort, differing in this respect from the stone covering of the Gargo glacier. The whole surface was one mounded grey expanse, more resembling the mid-Atlantic on a grey stormy day than anything else in the world. The stone-avalanches that kept pouring down the slopes of the mounds were not unlike the breaking of waves.

I reached camp again shortly before eight and found breakfast ready. An hour later everything was packed up and we started for the day's march. We again followed the left bank of the glacier, till our course was interrupted by a considerable stream of ice, which joined the main stream from the south. It precipitated itself from its upper reservoir, between walls of rock, in two fine ice-cascades. We crossed immediately below its foot, following a curious curved groove, which marked the junction of the

tributary with the main glacier. A stony path awaited us on leaving the ice once more. It led across a flowery slope where the wild currant (*Shatu*) was in blossom, and the ground was gay with sheets of a purple flower and of light blue forget-me-not. We pushed through a small wood of stunted hawthorn, and then the path took us uphill, high above the glacier, and again brought us down to the ice.

We crossed a snow-avalanche fan under a pretty group of high waterfalls, tumbling over a rock precipice. Shortly afterwards we came to a smaller side glacier, across whose foot we had to pass by ways stony and crevassed. Zurbriggen carefully watched the coolies to see which were the best. Whenever he noticed a good one he gave him a ticket for the Hispar pass, the less good ones being told off for the Nushik La. The reception of these tickets was not desired; each and all declared that their hearts beat fast, that they had pains in the chest, and made all manner of malingering excuses. "Go on, go on, animal! *charogne!*" was all the answer they got from Zurbriggen, and this was received with much laughter by their fellows.

Beyond the side glacier the path was better than anywhere before. It mounted high above the ice and traversed slopes that were covered with sheets of flowers of every sort and hue. Twice it led through shoulder-high copses of stunted birch, fatiguing to fight against. The well-marked nature of the path, and its overgrown condition, seemed to indicate that it had formerly been more used than of late years.

We now came opposite the opening of the Lak valley, which contributes a large icy tributary to the Hispar glacier. We had perceived, since the previous day, that this side valley must be a considerable one, but we were surprised to find how large it actually is. It cuts back, through the range of mountains bounding the Hispar glacier on the north, and it drains a snow basin and

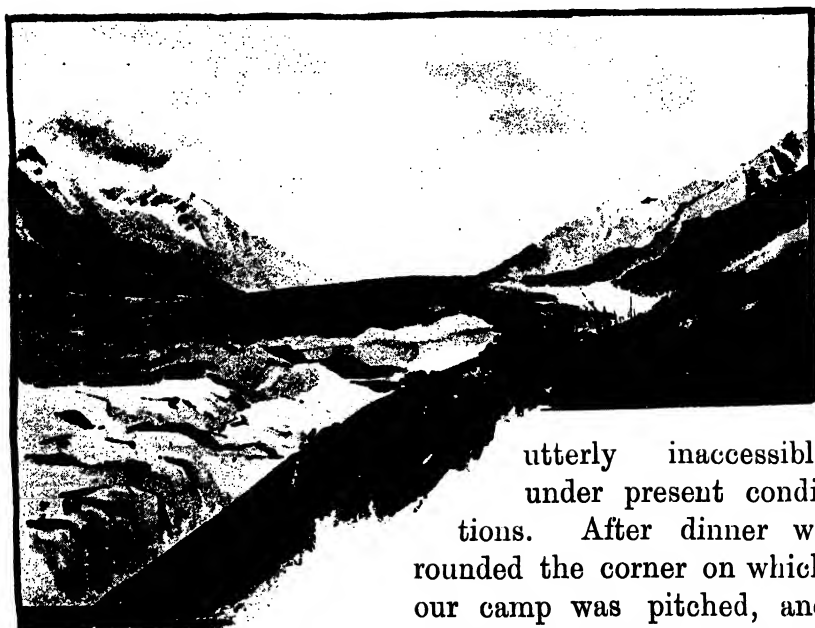
some yet loftier mountains behind, themselves the continuation of the north ridge of the Gualtar nala. Clouds covered the summits of this hinder range of peaks, but we saw enough to prove that it is loftier and more important than the line we thus far imagined to be the northern watershed of the Hispar basin. The Lak glacier has greatly shrunk in volume of recent years (or centuries); when it was in its fulness it used to push the Hispar glacier up against its left bank, but now it is too feeble for any such giant effort. The Hispar has therefore left a grey stony moraine slope, which the path we traversed mounts high to avoid. It seemed to me not impossible that the path was formed in the days when the glacier was thus expanded, for it would certainly now be possible, and probably more natural, to find a way (as lower down the valley) close to the edge of the ice, and so to avoid an unnecessary ascent of from 400 to 500 feet; but the path being in existence, it is of course easier to follow it.

Three-quarters of an hour after leaving the second side glacier we came to some very rude stone huts, and this was the end of our march.* The place is planted on a jutting shoulder, and commands a splendid view, not only of the Lak tributary and its peaks, but of the whole upper stretch of the Hispar glacier, and of our col at its head. We had only been two hours and a half walking, and as many resting, but the coolies took much longer, for the way was horribly rough. The name of the camping-ground is Gandar (13,070 feet).

The afternoon was cloudily picturesque. The view towards the col was always a delight to watch, for the sake

* The following were collected along the left bank of the Hispar glacier, between Chokutens and Gandar:—*Bryum caespiticium*, *Senecio chrysanthemoides*, *Leontopodium alpinum*, *Astragalus frigidus*, *Allardia tomentosa*, *Pedicularis pectinata*, *Juncus membranaceus*, *Salix hastata*, *Papaver nudicaule*, *Corydalis Govaniana*, a variety of *Potentilla sericea*, *Potentilla bifurca*, *Sedum tibeticum*, *Macrotomia perennis*, *Saxifraga flagellaris*, *Ribes himalense*, *Draba* near *D. alpina*.

of the shadows of the clouds that striped the glacier and manifested its extent, and the bright gleams of sunlight that now shone upon some distant peak, now spread themselves abroad over some wide expanse of snowfield or terraced icefall. Still I could hardly forgive the cloud mantle for hiding from us the upper portion of the great Lak ridge, which we shall not have a chance of beholding again. We were enabled to discover that there is in it a giant peak, which should have been completely visible from base to summit, and that the south face of this peak is an exaggerated copy of the Macagnaga face of Monte Rosa—



HISPAR PASS FROM GANDAR CAMP.

utterly inaccessible under present conditions. After dinner we rounded the corner on which our camp was pitched, and beheld the golden glories of the west, poured out as usual

over the Hunza and Budlas peaks. When we turned in a strong wind began to blow in gusts that flapped the tents about. The crashing of avalanches and of falling stones on the glacier mingled not inharmoniously with the music of the air, and did not interfere with our early slumbers.

July 13th.—The night was boisterous, but not cold, the

minimum temperature registered in the tent being only 47° Fahr. The wind blew in gusts, rattling the canvas and howling amongst the rocks. Towards morning rain fell, and made bed seem by far the best place, so that it was a quarter-past eight before we were ready to start. The day was not a promising one. All the summits of the highest peaks were enveloped in clouds, and appeared content so to remain. It was thus with difficulty and only approximately that I was able to fix the position of the various plane-table stations. The first half-hour of our march was most unpleasant, for Shah Murat led across steep slopes of grass and gravel, and occasionally through copses of low scrub that seemed to fight against us. We arrived, with ruffled tempers, at the angle of the foot of a small side glacier descending precipitously from a fine cirque of aiguilles. We crossed it in the usual ten minutes, and five minutes further on reached a group of goat-pens called Makorum. This is the place where, but for the laziness of the lambadhars, we ought to have encamped the previous night.

A good path led hence to the foot of the Makorum valley and glacier, at whose head is an easy col, which should give access to the Chogo Lumba. We crossed the stony maze at the junction of the two ice-streams, and noticed on the far side a remarkable lake, caught in the angle between the glaciers. Stones kept falling into its dirty waters with an ominous splash, sending rings of ripples all around. The path next led to the Chiring alp, near whose ruined huts we found traces of a recent encampment, which we concluded to have been Bruce's. We rested here for lunch, in a fine position, raised well above the glacier, whose grey billowy surface impressed us with its capacities for picturesqueness.

Hereabouts are numerous lakes in the ice, not mere round or oval ponds, but elaborate lagoons, with many bays and straits and islands, and with ice-cliffs for shores; and always stones tumbling over them and plashing into

the waters. Opposite, a large tributary glacier, Chur Gamu by name, came in from the north. It is remarkable that whereas the Lak glacier has so greatly shrunk of late years, this Chur glacier, its immediate neighbour, and which drains another flank of the self-same mountains, should, on the contrary, have greatly swollen. It now overflows all its moraines and pours in a broken spreading wave on to the surface of the Hispar. The reason is no doubt that the Lak glacier is much longer than the Chur, and that the accumulation of ice, consequent on greater snowfall a score of years or more ago, has had time to reach the mouth of the one, whilst it is as yet only half-way or so down the other.

We started off again at 1.45, and soon reached the left foot of the Chiring Chish glacier. The crossing of this gave more trouble than we experienced with the others, and forced us to make a *détour* to the left on to the main glacier in order to turn some large crevasses. At the far angle of the side glacier's foot we found another lake of imprisoned waters, pent up against the hillside; and here too we passed close by the end of a picturesque tunnel in the ice, which penetrated far through the glacier, and opened into a sunlit crevasse beyond. It was filled with water below, and a constant rain fell from the melting roof into the dark pool. I advanced as far as possible within this weird and chilly solitude, but was glad to retreat to brighter and less solemn regions.

We continued for some distance along the main glacier's stony floor before returning to its left bank. This all our coolies with one consent objected to do. They said that that was the way for Roudebush and the men going to the Nushik La, but that the route to the Braldo pass, as they call it, here crosses to the right bank of the glacier. We were amused to hear this unanimous testimony from men who had been for weeks declaring upon their heads that they had indeed heard tell of a Braldo pass in ancient and almost forgotten days, but

BUILDING HUTS AT HAIGTUUM.



that no man living knew anything whatever about it. As we did not wish to part from our companions any sooner than was necessary we continued along the Nushik route, and took to the left bank of the glacier again.*

We mounted gradually over the grassy and flowery slopes of the Haigutum alp, which brought us to what seemed to me a good camping-ground (13,880 feet) at 4 p.m. The tents were pitched on a little plateau commanding a glorious view. The coolies dispersed to collect wood, and dinner was swiftly served. They then set to work, and in little more than an hour built for themselves eight admirable stone huts, which they cleverly roofed over with slaty slabs of stone. They patched up the chinks in the walls with sods, and covered the roofs with earth, and were ready to face whatever weather might arise.

At six o'clock Roudebush and Zurbriggen went off with some of the servants to sleep out at a higher elevation for the Nushik La, which they intended to cross next day. McCormick and I sallied forth to watch the cloud-enveloped sunset and the drifting of the high and heavy mists from the south-west—the fatal quarter so prolific of bad weather to us all the year. Standing on the edge of our plateau I noticed in the midst of the glacier a narrow band of clear ice. It started a mile or two lower down than our camp, and stretched, widening upwards, without intermission, back to the snowfield. Thus we had at last reached the limit of the wholly stone-covered ice, and our next advance would be, not upon loose and angular stones, as heretofore, but upon a good and fairly even surface of ice, over which progress might be expected to become more rapid.

* Found along the left bank of the Hispar glacier, between Gandar and Haigutum:—*Ranunculus rubrocalyx*, *Carex Moorcroftii*, *Taraxacum officinale*, *Erigeron alpinus*, var. *uniflorus*, *Polygonum viviparum*, *Lychnis brachypetala*, *Lloydia serotina*, *Potentilla fruticosa* var. *pumila*, *Pleurospermum Candollei*, *Chorispora sabulosa*.

July 14th.—The night was warm and wet, and it rained at intervals all the morning. Between whiles there were wonderful breaks and clearings in the clouds, which kept our attention continually on the alert. Early in the day our pass could be seen at the end of the long glacier ahead of us, and sometimes we could distinguish most of the peaks that line the avenue of approach to it, but presently clouds settled down upon the snowfield, and made the stone-covered glacier area the limit of vision. This was one of the finest effects we saw: the grey billowy surface below and the grey sky above, with just a suggestion on either hand of slopes vanishing into the invisible. Then the sun burst through and cast golden patches on to the glacier, or gilded the edges of some row of stony mounds at the verge of the view. Here and there a peak's head would stand out for a moment, incredibly high, framed in cloud, a vignette from another world; but soon the rain would come on again and drive us into the tents.

I had a long morning's work, inking in the map and fulfilling other duties.* Before it was over the sun shone fitfully, and when it shone we wished the rain would return, for its coming was the signal for the outrush and onslaught of hundreds of winged creatures upon us. There was the common or garden fly, with his usual wariness; but he was far outnumbered and outnuisanced by a smaller thing of his sort, an ignorant, unsophisticated, inquisitive creature, who made straight for one's face and settled firmly upon one's cheek, or burrowed and buzzed in one's ear. He was fortunately slow, for a fly, and ridiculously easy to kill, but the slaughter of one every moment diminished neither the number nor the zeal of the rest. We slapped our faces and ears till they were red and tingling, but in the end had no remedy save patience—a thing denied to us both. Besides flies there were numberless mosquitoes, which settled on our legs and bit us

* *Ranunculus rubrocalyx* was growing near our camp,

through the stockings till we hopped again. The poor things had probably not tasted human blood for many generations. They made the best of a rare opportunity in spite of a terrible slaughter. My ink-pot was the only diversion, and into this all the winged things with one consent endeavoured to plunge; they thickened the liquid with their corpses, till the pen dipped into it always brought up one or two transfixed on the nibs.

Every one in camp had a busy time, for there were ten days' provisions to be cooked, sheep to be killed and dressed, and all final arrangements to be attended to. In the afternoon I was able to set up the plane-table, and work at it in the intervals between hailstorms. I also caused the coolies to build a monster stone-man of the strong square sort they make in these parts, on the site where the table stood. They worked at it with a will, crying out in their shrill voices, "Konawei Sahib ke Tamerei." McCormick sketched whenever he had a chance, which was not often, so that in mid-afternoon he became horribly bored. He lounged into my tent, and lay on the carpet in a state of demoralisation. "Give us a bit of advertisements to read," he prayed: truth to tell, that was all the literature we had left. We missed Roudebush greatly, for he was full occupation for all his neighbours, and could kill any quantity of time for himself and them without the smallest difficulty. The local guide, who was to have piloted him over the Nushik La, returned to camp at dinner-time in a state of exhaustion. His party left him far behind, and, as he could not catch them up, he chose the better part and came downhill again.

After sunset there was a real clearing of the weather. The wind, which had for some days been south-west, veered round to the west, and then blew with a point or two of north in it. The temperature fell rapidly, the sky became splendidly transparent, and there were all the signs of good weather to come. Accordingly we turned in early with steadfast and hopeful hearts, notwithstanding

the arrival of a dâk wala from Nagyr, the bearer of yet a third letter from the old Raja, urging us to give up our intended journey because of the dreadful dangers of the way.



SUNSET FROM HAIGUTUM.



THE NUSHIK LA FROM KANIBASAR CAMP.

CHAPTER XVII.

THE NUSHIK LA.

BEFORE continuing the account of our passage of the Hispar pass, it will be well to relate the doings of our companions who crossed the Nushik.

It has long been known that there was a route over the mountains, not unfrequently followed in former days by natives travelling between Skardo, the capital of Baltistan, and Nagyr. The pass was believed not to present any extraordinary difficulties, and even cattle were stated to have been taken over it. Of late years, however, the natives admit that they have rarely crossed it, if at all. They state that the road became buried in snow, and that it ceased to exist as a practicable route from their point of view.

Nevertheless, efforts were repeatedly made on behalf of the Indian or Kashmir authorities to discover the Nushik

route, and a few of the expeditions to this end have been more or less publicly recorded. The most important were two. The first was made in September, 1861, by Colonel Godwin-Austen, and is described in the *Journal of the Royal Geographical Society* for 1864. The second was undertaken by Major Cunningham, not many years ago. Both officers started from the Shigar valley, ascended to Arundo, at the foot of the Chogo Lumba, and then mounted the Kero Lumba and its glacier to the Nushik pass at its head. They found the pass to be corniced with an overhanging wave of snow, and the snow-slope below it, leading down to Haigutum, seemed dangerously steep. Colonel Godwin-Austen had no intention of crossing the pass; Major Cunningham did not try the descent towards Haigutum, but returned in his steps. Native explorers were not likely to succeed where Englishmen failed, and accordingly the pass, though occasionally visited from the south, remained uncrossed by any party capable of recording its experiences.

It was part of our plan to attack this pass from the north, and accordingly, as has been related, I sent Bruce and Eckenstein off from Hopar to make the attempt. The following private letter is Bruce's account of his experiences :—

“ASKARDO, *July 11, 1892.*

“Here I am, arrived by the Nushik pass. I ought to have been back with Conway five days ago, but, as you will see, appointments at a certain time in a virtually unknown mountain country cannot always be kept. Here is a brief account of the passage. From Hopar, above Nagyr, on the way to the Hispar pass, or Biafo glacier, Conway and I arranged that I should cross the Nushik—which had been tried but never crossed by a European—and bring him back from Baltistan, salt, grain, and twenty-five to thirty coolies. Accordingly, I set out on June 27th for Hispar, which, we were told, we could reach in a day; as we did in a hard day of thirteen hours, scrambling over a vile road.

The next day at Hispar I arranged for men to cross the pass with me, and got seven first-rate men, the best as a lot I have seen at all. On the 29th I left Hispar for Makorum (which is placed too near Hispar on the map), and arrived there in eleven hours—at least nine being on moraine or moraine-covered glacier—a most tiring amusement. The following day, in breaking weather, we reached Haigutum (marked on the map Hyoukuru), at the mouth of the Nushik. Here we arrived in snow at three o'clock



LOOKING UP THE HISPAR GLACIER FROM THE FOOT OF THE NUSHIK LA.

in the afternoon. It then proceeded to snow for forty hours, during which I had to make an expedition down for three hours to cook. July 2nd was fine after seven o'clock, with a brilliant sun, so on July 3rd we started for the pass at 4 a.m. We were originally told that the pass was good enough for ponies, but no one had been over it for twenty years. An old man, who accompanied us, had been over in his youth, however, and knew the general direction of the way. We left the huts at Haigutum, and descended

on to the small Haigutun glacier, which is a tributary of the great Hispar glacier. The glacier is a good deal crevassed, and I found it necessary, within half an hour from leaving camp, to put the rope on to the four leading men. In twenty minutes more we turned to the left on to steepish slopes of snow-covered glacier. The snow was occasionally just sufficiently hard frozen to let us in suddenly over the knees. After a rise of about 700 feet we bore right, diagonally across the mountain, crossing two or three large crevasses. After about three hours we came to a place which made me



FROM HISPAR SNOWFIELD CAMP, LOOKING DOWN THE GLACIER TOWARDS THE NUSHIK LA.

stop and consider. Directly in front, along the way that the old man with us remembered, was a steep snow-slope, which measured 52° * of steepness, and terminated in an ice-precipice. Across this lay the direct route to the col. To the left, and immediately above us, were steep snow-slopes, and a great crevasse, crossed by a doubtful bridge—a much longer but rather better way, with no fear of starting an avalanche. The snow on the first-named steep slopes did

* Eckenstein says $52\frac{1}{2}^{\circ}$ (see below). This is probably a mistake for $42\frac{1}{2}^{\circ}$. The measurement, Bruce informs me, was made by Eckenstein with the clinometer I lent him, which was only graduated up to 45° , and could measure no steeper slope.

not please me. I was afraid of the whole surface coming away with so many men as we were; but two of the Hispar men knew better than I, and, roping themselves together, and taking my axe, they trod and cut steps right across the face.* These men are quite at home on snow, and understand the use of the rope and axe very well, though our European axe is very much better than their own style. We all crossed after them, keeping good intervals, so as not to put too many men together. From here to the col we went over some more crevasses and steep slopes with rather shaky snow, and along a short but unpleasant way under the great cornice, which follows the whole ridge. Parbir cut through the cornice and let us out on to the top of the col, 16,800 feet above the sea. Time 9.45 a.m. From here to our camping-ground, which we reached at 3.30 p.m., was easy, and we travelled rapidly. The next day, long and tedious, with much moraine, took us to Arundo, which we were very glad to reach, as for two days we had been on very short commons indeed.

“At Arundo we stopped for one day, to eat chiefly, and then were obliged to go off to Askardo to get boots mended, stores of several sorts, &c. I had to give up recrossing the Nushik for several reasons—the distance to go from Askardo, the difficulty of arriving at the ridge in the early morning from this side, and the danger of crossing, owing to the whole of the pass being greatly exposed to avalanches, unless the weather is very certain.

“When we arrived at Molto, near the junction of the Basha and Braldo rivers, I gave up walking, and took to a small skin-raft of inflated goatskins fastened together with withes and managed by four men with poles. It is a wet and exciting mode of progression, as one is carried at from nine to ten miles an hour, and occasionally much faster in the great rapids, down the river.”

* Very few of the natives, only the *shikaris*, possess this kind of rudimentary knowledge of mountaineering. The ordinary villagers are hopelessly useless on ice.—W. M. C.

Eckenstein's account of the Nushik pass, extracted from his diary, is likewise appended for completeness' sake.

"We started at 4.15 a.m. in beautifully clear weather. The way went first along the top of the old moraine (on the end of which Haigutum is situated) and then down to the Haigutum glacier, which is reached in ten minutes. This is crossed diagonally in half an hour to the foot of the slope opposite (*i.e.*, the north-west slope of the mountain east of the pass), which is struck at a point considerably to the left of and below the pass, the part below the pass being steep and raked by avalanches. From here to the top of the pass took four hours and a half. The whole way up is on steep snow-slopes, cut up by many schrunds, and it is impossible to go without traversing some places where there is danger from falling ice. The slope is of a considerable average steepness, the bit which was steepest (about 150 feet high) being at an angle of $52\frac{1}{2}^{\circ}$.* Bruce, the two Gurkhas, and old Shersi went roped together in front, and I brought up the rear. The dog acted like a true mountaineer. When the slope got too steep for him to run about on, he gave up frolicking around, and followed soberly and properly in the steps. At the beginning the snow was somewhat soft, and for a short time unpleasantly so. Our progress was regular and uneventful for rather more than half-way up. The place we then got to presented two alternatives: either to go over a schrund *via* a very shady snow-bridge, which would have been followed by a fair snow-slope; or to avoid the schrund by going to the right. This was very much the more direct way, but involved going up the steep slope mentioned above, and a slip on this would certainly have been fatal, as it terminated in an ice-precipice below. The slope was ice underneath, covered by about a foot of not over-good snow. I abstained from saying anything, and asked Bruce to let the natives settle it between themselves, and their subsequent performance proved full of interest. Two of them

* See footnote, p. 352.

put down their loads and took off the goat-hair rope they use for carrying. They took a double length of this, and one tied it round his waist in true orthodox style. They then borrowed one of our axes (which so far had not been used). The first man (who was tied round the waist) started ahead with the axe, cutting steps, followed by the second man, who held the two ends of the doubled rope tied round his stick, which he drove in as he went along. And so they went along till the easier slope above was reached. Then the others followed, and subsequently three went back to bring up the two loads that had been left behind. It was really a capital performance, and would have done credit to any men. Altogether their performance, and that of the other five natives as well, was one that not every Swiss guide would care to imitate under similar conditions. None of the loads were much above 30 lbs., but were all arranged to be inside this limit as far as possible. Just below the top of the pass there was a rather nasty piece of slope, with snow that was very rotten. Our natives all stopped, and each said his prayers before going on to it. The top was all corniced, and we did not go over quite the lowest point of the pass, but at a point about 50 feet higher to the east. Amar Sing and Parbir (the two Gurkhas) cut through the cornice, the passage of which required the use of the rope in the case of every member of the party. We reached the top at 9.40 a.m., and the view from there is truly splendid."

When we reached Haigutum on July 13th we had no idea that the pass presented the difficulties described in the foregoing passages. The Nagyr men all preferred the Nushik to the Hispar pass, and we believed it to be much the easier of the two. There is no danger from avalanches or falling ice on the Hispar, but much from fog and bad weather. The coolies who crossed the Nushik and those who came with me over the Hispar, when they were paid off at Askole, preferred to return to Nagyr by way of the Nushik.

At Haigutum I accordingly divided the baggage, taking with me only the things that were absolutely necessary for McCormick, Zurbriggen, and myself. The rest I handed over to Roudebush. His instructions were to convoy the things, over the Nushik, down to the Shigar valley, and thence to send them up the Braldo valley to Askole, whilst he went on to Skardo and established himself there till the Gilgit luggage arrived. Zurbriggen was to accompany him for two marches, and then to return and join me again higher up the Hispar glacier.

After dinner we bade each other farewell, and off Roudebush and Zurbriggen went to spend the night at some wretched huts round the corner, near the foot of the left bank of the Haigutum glacier. The route they followed next day at first coincided with Bruce's, and then ascended east of and parallel to it. They avoided the overhanging ice by crossing the watershed about 500 feet higher than the true col, and then descending rocks to the plateau behind it. But Roudebush shall tell the story in his own words. The letters were not intended for publication.

" July 15th.

" After I left you the other evening we went about a mile over the worst road you ever saw. It would have been easier lower down, but longer. We came to a sort of maidan, with any number of huts. I forget its name. We slept there; it was where Bruce slept. Next morning, the weather being bad, we did not get off till 4.30. Then we crossed the glacier and started up the mountain. Ali Shah would not go with us, but up his own road (the way Bruce went). After toiling through bad snow for two hours we saw all the coolies in a fearful place. They would go with Ali Shah, and he insisted on going straight up an icefall, then under a lot of overhanging ice. I can't explain all the difficulties of the way, but Zurbriggen will tell you. Anyway, that fool, Ali Shah, gave us a lot of trouble. Zurbriggen worked like a nigger. All the last part of the way we were either in cloud or driving snow. We got to the col at eleven o'clock with the coolies. They kissed Zurbriggen's boots and cursed Ali Shah, who, by the bye, is on the mountain yet, unless he got back to you. Don't pay him a cent. If he had not been there we should have done much better.

" We began down the other side with some rather bad rocks. The coolies could not get down them, so Zurbriggen went back and fetched

them one by one. Then we went down a smooth glacier for about a mile or more to an old sleeping-place. No signs of Bruce. The coolies didn't want to stop, so we went on down the glacier, which must have changed a great deal since Godwin-Austen was here, for it is an impassable icefall where his track is marked. We got into awful difficulties by trying to follow that. There is an easy way on the other side. When we got out of the broken ice we came to another flattish spell, and that brought us over to where we are now—the coolies don't know the name—in all fifteen hours, and most part in very bad snow. We came the only way possible. Even I could see that. How the people went before I can't imagine. Things must have changed. Bruce won't come back to you, I know. Zurbriggen starts back at two this afternoon, and I down. It looks about two miles of good glacier for me, and then moraine all the rest of the way, with perhaps a small side glacier to cross here and there. The coolies won't go back over the pass, but round by Gilgit. One goes with Zurbriggen. But for Zurbriggen you would never have seen me again, I am certain; I shall never forget his services to me; he worked wonderfully. I shall go on hence as fast as I can. All the coolies are blind. Tell Mac I've been higher than he has. Good-bye! Good luck!

“P.S.—The Hispar coolies are much the best we've had—splendid chaps. I saw very little from the col, worse luck! It only cleared for a moment. My face is a sight to behold, and I can't open my mouth. The bearer only gave me one cup of sugar, so to-day we have none—please slang him for me. So long!”

“SKARDO, *July 18th.*

“I arrived here yesterday, and glad I was to get in; it is a most lovely place. The pass over, I said good-bye to Zurbriggen and started down the glacier, crossed three side glaciers, and went on to a most beautiful meadow. In three and a half hours reached a *bakri* place—no end of cattle; about a thousand head of cows and steers, as many sheep, and twice as many goats. I wish Mac had been there when they drove them in at night; it was most picturesque. Slept there. Next morning went on to Arundo—three hours over some good and some awful road. There changed coolies and marched on four and a half hours more to—(forget name). Slept.

“Next day marched seven and a half hours to Dalpur (or some such name). There was one place on the road like the rigging of a ship—horrid. Slept.

“Next day went down the river to Shigar on a skin raft in two hours. Good sport shooting rapids. Got a pony at Shigar and rode to Skardo over a sand desert; vile road and hot. I am now staying with Townshend. My leg is pretty bad, and the doctor says it must have rest, so I can't come to Askole. I will stop here and pull up, and then 'march down with the army' to Srinagar. I am sending on all your things and the mail. Anything you want done here or from here I can do for you. Send me some cigarette papers, and keep Salama for the next two weeks if he's

any use. There is no tobacco here, so I can't send any. Write me how things are going on."

Zurbruggen's account now only remains to be given. I took it down from his lips the day after he rejoined me on the Hispar glacier.

"We started," he said, "after four o'clock, coolies and all together. It was a bad morning, but we could not wait. We traversed down to the glacier and crossed it. Then Ali Shah would turn to the right and go on up the glacier, right under some seracs. He is a fool. I would not go that way, and called to him to come back; but he went on, and the coolies after him. They went under a dangerous overhanging glacier, and might have all been killed at any moment.

"Roudebush and I turned straight up a snow-slope that got steeper as we went on. Snow began to fall, and the weather was horrible. We got up to a flat place—a snow plateau—and there we sat down and waited two hours for the coolies, but could see nothing of them. So I went down again for half an hour and kept calling for the coolies. At last I found them in a bad place, and cut steps for them and brought them through—all except Ali Shah. I don't know what happened to him. In this way we were all together again on the upper plateau. Looking upwards from here, the pass was away to our right, and there was a mound of snow on the ridge above us. When we started up again the coolies *haben furchtbarer Scandal gemacht*. They swore and threw down their loads. So I went back and boxed the ears of two of them, and then they said they would come on. I kept a sharp watch on them, though. Ultimately I got them all to the top. We reached the ridge by way of the mound, and the pass was then some distance below us. Between us and the pass were some rocks. We went down to them in a quarter of an hour, and there we sat down and ate.

"Presently Roudebush and I scrambled down the rocks to the snowfield, a little way below the pass. We told

the coolies to follow us. Roudebush said nothing, but did as I told him, and took great care. He hated the work, but went all right, and I would take him anywhere. He does what one tells him, and that's the great thing in the mountains. We waited an hour for the coolies, but they did not come, so I went to the col, and then up the corniced snow-ridge to the coolies. They had not moved; they said they would not; they said they would die there. Of course if we had left them they would have died, for they could not get down the way they came up. I swore at them. At last, one way and another, I got them to move. I helped the first man that started, and, when the others saw that I helped him, and that he got along all right, they came too, and I helped them all, one after another. I had to keep on going up and down. It was terribly hard work. The rest of the day they followed me like sheep.

"When we reached the level snowfield we went down it, following the track marked on the map. That brought us into great difficulties in the midst of some of the worst seracs I ever got through. If we had kept hard to the left (as I did on the way back) it would have been easy enough. I had to help the coolies, one by one, down the steps I cut amongst the seracs, going up and down to do so. It was very tiring. At last we got out on level glacier again, and presently reached the place where they sleep. It was half-past seven o'clock, and we all slept till eight o'clock next morning. We stayed where we were till two in the afternoon, and then Roudebush started down with eleven coolies, and I started up again with the twelfth.

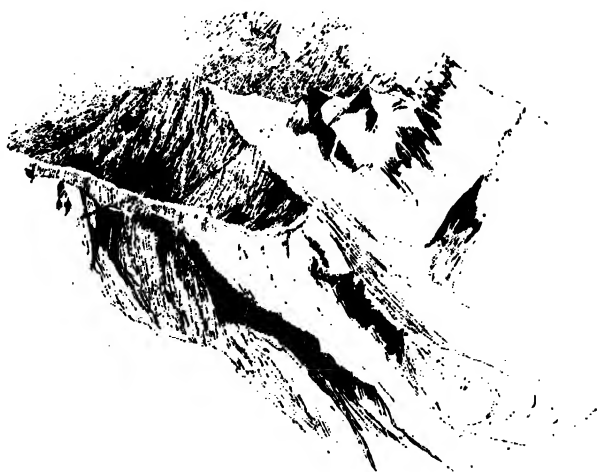
"I came back the better way, got to the col in three hours, and up to the crossing-place in three-quarters of an hour more. We put on the rope and hurried down to the foot of the steep slope. That took us an hour and a half. We had to light the lantern then, and go stumbling across the Haigutum glacier. Instead of half an hour, it took us an hour and a quarter to reach the huts where we slept before. Their name is Bapo Ding Malik Bakanz. To-day I made

the long march up the glacier to you, and now I am dog-tired. I thought I was never going to come up with you this evening." *

* If I were writing a "Climber's Guide to the Karakorams," the following would be the directions in it for the Nushik pass:—

From Haigutum, go round the corner low down, below the stone-man, in 1 h. to a group of huts, called Bapo Ding Malik Bakanz, on the left bank of the Haigutum gl. There are about a dozen little stone huts with earth-covered and grass-grown roofs, difficult to see. Traverse the hillside in 20 m. to the gl. Cross the gl. in 30 m. Zigzag up snow and avalanche slopes, traverse gentle snowfields, and finally climb a steep snow-slope to the top of the conspicuous snow-mound east of the actual col. The ascent from the gl. takes 3 h.

Descend westwards over snow followed by rocks to the *nevé* by the col, which you strike just below the *bergschrund*. At the top of the rocks is the rough wall of an old sleeping shelter. The descent to the *bergschrund* takes $\frac{1}{2}$ h. From the col go down the level snowfield for 1 h., making for its *left* angle. Turn the angle to the left, and you come to moraine and four or five old sleeping shelters, called Stiatbu Brangsa. Go down the l. moraine for 1 h. (big seracs on your r.) to the level gl. Descend this, bearing gradually across it to the r., and in 1 h. reach the top end of the r. moraine, down the crest of which an old path leads you for about $\frac{1}{2}$ h. Here there is a little brushwood. Cross the mouth of a side gl. in $\frac{1}{4}$ h., and take to the main r. moraine again. Beside that, a little lower down, is Kutche Brangsa—a good camping-ground with brushwood. The remainder of the way is correctly marked on the map.



THE NUSHIK LA FROM KANIBASAR CAMP.



"THE ROAD IS BAD!"

CHAPTER XVIII.

THE HISPAS PASS.

July 15th.—The night temperature was not low (min. 35° F.), yet we suffered from cold, owing to the damp. The morning did not fulfil the promise of the sunset, for there were many clouds about. However, they left the summits of the high peaks discreetly clear till the middle of the day, and then, though for a while they thickened, there was no rain. In the evening they all cleared away once more. St. Swithin was propitious. We started off at 5.30 a.m., and, after traversing the stony slopes of Haigutum for a few minutes, turned down to the glacier and began to traverse diagonally, over all its horrible stones, to a narrow strip of clear ice far away in its centre. We had not gone far before the Haigutum valley on our right began to open

up and disclosed to our interested gaze the Nushik La and slopes leading up to it. We were surprised to find it so much of a mountaineer's pass, and by no means the pony track it had been described to us. The whole pass is fringed with a considerable cornice, overhanging dangerously steep slopes. We were unable to detect any trace of the tracks of Roudebush and his caravan of coolies. The passage of the stony belt along the left side of the glacier took three-quarters of an hour. How delightful it was to tread once again on a surface free from stones, and to be able to step out, unrestrained by the necessity of constantly selecting a footing! We promised ourselves a long and easy march, and strode happily ahead.

But the glacier was not going to let us off so easily. It does everything on a large scale. What on smaller glaciers are mere mounded elevations and depressions, up and down which one runs unheeding, are here hills fifty or more feet high, with slopes that one has to negotiate carefully. The surface streams that we are accustomed to step over in the Alps were here rivers that could rarely be crossed. Moreover, they meandered so widely about the free part of the glacier that we were by no means able to choose our route as we pleased, but must follow their mighty sinuosities. Thus our progress, though pleasanter than on previous days, was far from being swift or easy. There was a constant going up and down hill, many steps to be cut, and other fatiguing work to be done, besides a great deal of plane-tabling. A peculiarity about the surface streams of this glacier is worth notice. For some reason or another they always undercut one of their banks. They constantly change their courses, and so the whole glacier is intersected by stream beds, each with one overhanging bank. The overhanging banks generally face up the glacier, so that they do not so greatly incommode the traveller going towards the col, but they might be a serious impediment to one descending from it.

In the course of the afternoon we came opposite the

opening of the largest tributary glacier we had yet encountered. It comes in from the north, and is called the Kanibasar glacier. One of its upper reservoirs bends considerably back to the west. It drains a vast basin, surrounded by high peaks, whose summits were unfortunately buried in cloud, but we were kindly permitted to see a series of snowy peaks, belonging to a range yet further to the north, peeping over a portion of the ridge that bounds the snowfield in that direction. Thus it is in this country—northwards the high mountains seem to have no end. Ridge behind ridge, crest behind crest, glacier behind glacier, they stretch away in monotonous parallelism, through regions uninhabited and even unvisited by man.

The march was a hard one for the coolies. They hate ice, and whenever they could get the chance they rushed for the stone-covered surface, the stones being less cold than the ice for their insufficiently covered feet. Early in the afternoon they began to show signs of fatigue, so I gave the signal for pitching camp as soon as a suitable place could be found. We turned accordingly towards the right bank of the glacier and forced our way for half an hour through a crevassed and stony tract. There was some difficulty in getting on to the hillside, for not only was the glacier's edge precipitous, but it was fringed with a series of deep pools into which stones were being constantly discharged. Once on the bank we reached a good camping-ground in ten minutes—a little meadow (14,110 feet) moderately bright with flowers, and possessing a sufficiency of stunted bushes to supply us with fire for the night. The remainder of the afternoon passed busily away, and then the setting sun was rarely generous to us. After clearing away the clouds and striking blue shadows from every one of the countless sharp snow arêtes that rib the white wall of peaks to the south of us, he retired beyond the far valley end and hid himself from our eyes, but poured such a flood of amethyst light along the valley's furrow that all the peaks around became like violet crystals, glimmering against

a golden bed. We feasted upon the glorious sight as long as it lasted, and then, full of delight, retired to our tents. Later on, before going to sleep, I looked out of the tent door and beheld an arch of silver light spanning the sky. I thought it was the rising moon shining upon some band of vapour, but discovered it to be the Milky Way, thus unusually brilliant in the clear altitudes. All night long stones kept tumbling off the glacier's side and plashing into the pools.

July 16th.—The night was cold, and so was the early



THE RIDGE PEAK FROM KANIBASAR CAMP.

morning ; the minimum temperature registered was 28° , but on the glacier it must have been much colder, for all the streams were frozen hard, and the lakes were covered with an inch of ice. On such mornings it requires an

effort to quit the warmth of one's tent and to pack and start before the coming of the sun. However, facing our troubles, to avoid worse, we were off at 5.30. The coolies took the route over the slopes on the right bank of the glacier. McCormick and I struck straight out on the ice, and in three-quarters of an hour reached the clean surface somewhat beyond the middle of the stream. It was a glorious morning, and all the peaks were clear. We could see to the head of the great Kanibasar tributary and observe the grand peaks that shut it in. The col before us and all the peaks around it were also clear, and some new and wonderfully

formed mountains stood out beyond it, piercing the sky. On our way there was a crevasse covered with a roof of ice of the kind described in Whymper's "Andes." It appeared to have been burrowed under by a stream; the covering was very thin in some parts.

We were forced, by the tendency of the glacier's ridges and moraines, to keep far away from the right bank where were all our people and provisions, so that tiffin time found us altogether out of tiffin's range. We were just entering the domain of snow, frequent patches of which began to cover the ice. As we advanced, the snow became thicker and more frequent, and the crevasses began to be bridged by it. Being without a rope we were forced to move with circumspection, and the more so as we were entering a region in which crevasses were numerous. We were opposite the mouth of another great tributary glacier entering from the north, larger even than the Kanibasar which so astonished us the previous day. For our new acquaintance there appeared to be no name. Guides and coolies declared that none of them had ever come so far as this, and that if the glacier had a name they never heard it. Right at its head rises a splendid snowy mountain, a mighty pyramid buttressed with fine ribs of rock and crested with overhanging masses of ice. The peak might possibly be ascended by its west arête; at all events it looked more promising than most of the peaks in these parts, but the journey to its base would be long and difficult. Clouds presently wreathed its summit and added to its grandeur. We could not but pause long to enjoy the only sight of it that we shall probably ever behold, a sight, however, that has become a life-possession, one of the finest jewels of a mountain lover's memory.

For an hour or more we fought our way through the crevasses till we became too hungry to continue the combat. So we turned sharp to our left and, following a ridge between two schrunds, reached the right bank once more close to the west angle of the meeting of the glaciers.

Half-way across the side glacier we found the coolies awaiting us with our food, and while we devoured it they traversed the remaining part of the side glacier and climbed to a finely situated terrace at the opposite angle of junction (Snowfield Camp; 15,240 feet). There they pitched the tents and made all ready against our coming. Shortly after we arrived at camp a row of coolies stood before me with hands joined and melancholy faces. "The road is bad," they said, "have pity upon us, and let us all go back." They stood patiently but not hopefully before me repeating these words. "The road is bad, Sahib, alas! the road is bad." I was sorry for the poor fellows, but could do nothing for them except promise endless sheep, bakshish, and general *tamasha*, as a compensation for their troubles when once we got to Askole.

Presently word was brought that there was a man coming up the glacier towards us. "A letter from the Raja!" said some; "perhaps we shall go back after all!" I hoped it was Zurbriggen, and so, in fact, it proved to be. He had done the incredible, as I have already recorded. He arrived in camp an hour later, sufficiently fatigued.

We were now above the limits of fuel. It was all that could be done to bring together enough dry roots, withered grass, and other indifferent stuff to cook a dish of soup and a cup of tea. But the Gurkhas and coolies had, notwithstanding my orders, reckoned on being able to cook their bread for the pass at this camp. We were thus obliged to arrange for a day's halt here, in order that the coolies might go and collect wood a couple of hours' march down the glacier, and bring it into camp for the needful cooking. We scarcely regretted the necessity, for the last two days had been most fatiguing to us all. When the coolies heard that two nights were to be spent at this spot they set to work and built a set of beehive stone huts as at Haigutum, fitting them into the clefts of the rocks above our camp. The little village was soon finished, and (who knows?) may hereafter be of service to future travellers. In the evening the



THE RIDGE PEAK FROM HISPAR SNOWFIELD CAMP.

sky became thickly covered with clouds, which descended low upon the mountains, and evil-omened gusts of wind afforded small promise of fine weather on the morrow.

July 17th.—The promise of bad weather was graciously belied. The night turned crisp and cold, the sky cleared; in the morning everything was frozen hard, and the sun rose upon an unclouded world. Ten coolies went off to fetch wood for their bread cooking. I spent the whole day in camp working at all manner of needful things. A new sheet of paper had to be stretched and adjusted on the plane-table and a series of rays drawn upon it. A round of angles were taken with the theodolite. There was much writing to be done. Zurbriggen had to relate his experiences and observations, which he did with admirable clearness, and I took them down, as far as possible in his own words. Then there were clothes to be clouted—a laborious and lingering operation that came to be done far too often. Meanwhile Zurbriggen mended our wretched boots by the only means possible, clamping patches of leather upon them with copper rivets.

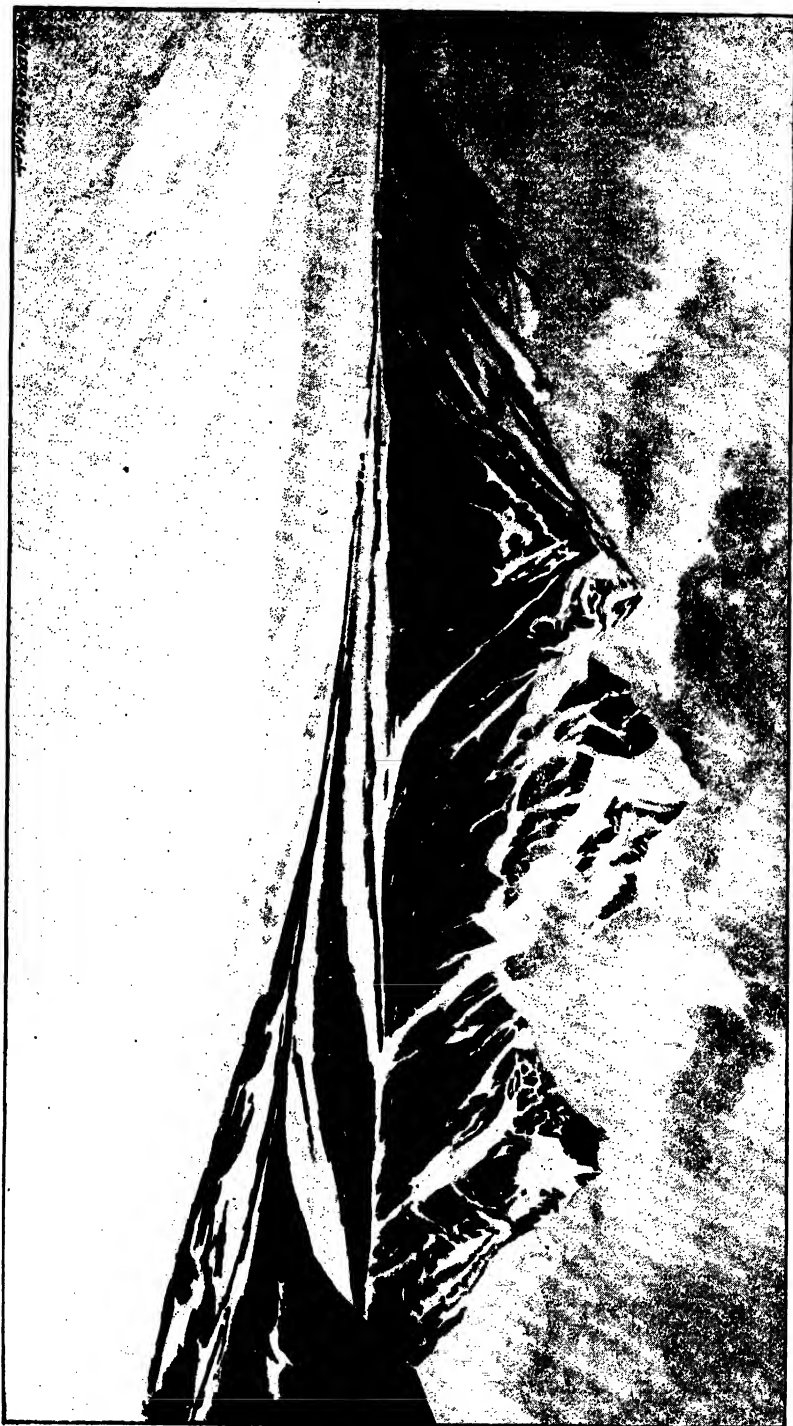
The view, spread before our eyes, was indeed superb. Between Hispan and Haigutum the glacier receives numerous tributaries both from north and south. Above Haigutum the northern tributary glaciers become more numerous and larger, but the Haigutum glacier is the last tributary from the south. The ridge, that runs from the Nushik to the Hispan pass, rises in a mighty wall direct from the surface of the glacier, and it was this wall that was ever before our eyes during the day of our halt. It is draped from end to end in shining white. Nowhere could I discover a point, east of the Nushik La, at which an ascent would be possible. The whole face is swept from end to end by avalanches, and their furrows engrave all its slopes. There are many ice precipices and hanging glaciers. Falls of ice and snow were constantly taking place, and the boom and rattle of avalanches was almost continuous. The average height of the ridge is considerable, but there are a few noticeable

peaks rising above the rest. Opposite to us was the finest of these—a hoary giant, the Ridge peak. Further on to the left, two or three needles of rock stood on the crest in daring isolation, forerunners of the group of towers with which the Biafo glacier was to make us acquainted.

All day long the mountains displayed their wonderful variety; and in the west there appeared distant giants which the clouds previously hid from our view. At dinner-time we enjoyed an interval of rest. The sun dropped low towards the Budlas range, and presently sank behind a near ridge, but its light swept up the glacier valley for a long time and painted wondrous harmonies of colour on the face of the magnificent wall of snow over against us. The mountain pillar that bounds our col on the south was the centre of the view from our tent door. It grew at first faintly golden in the evening light, just when the eastern sky was becoming pale and losing the intensity of its mid-day blue. Gradually the warmth faded out of the light, and the peak stood pale against a purple background, all the shadows upon its snow-slopes being blue, whilst the sweeping curves of the main glacier were defined by harmonious shades of soft blue-grey.

The pious coolies stood here and there amongst the snow, praying towards the west in those picturesque attitudes wherewith Islam has endowed the world. McCormick and I sallied forth to our work—he to paint the glorious west and I to whirl a sling thermometer round and round over my head and to set up and read the other instruments. Meanwhile the splendid display of whatever is most beautiful in subtle harmony of tones was being continued on the snowy face over against us. But who shall tell these things in words or bind such loveliness in language? We watched the fading, changing, mellowing glories of earth and heaven, till the cold air made inaction painful, and we reluctantly turned away and shut ourselves into the tents for the night.

JUNCTION OF THE LAST GREAT SIDE-GLACIER WITH THE HISPAL GLACIER, FROM ABOVE SNOWFIELD CAMP.



July 18th.—On awaking in the morning we found the south-west wind drifting, swiftly and high overhead, a flat layer of thin cloud. It moved like a rigid sheet, without any internal commotion or visible change of form. This presently dispersed and left the most brilliantly fine morning behind that it was ever my lot to enjoy. We intended making only a short march, and camping as near the foot of the final ascent to the col as possible, so as to reduce the labour of the coolies. Accordingly we started at 5.40, sending the coolies under Karbir's direction up the left bank of the glacier, whilst we struck straight out into the midst of it for mapping purposes. When we were well out we found the snow in admirable condition, and the pass was also nearer than we supposed. "Why," we all said—"oh, why did we not start three hours ago and cross the pass to-day?"

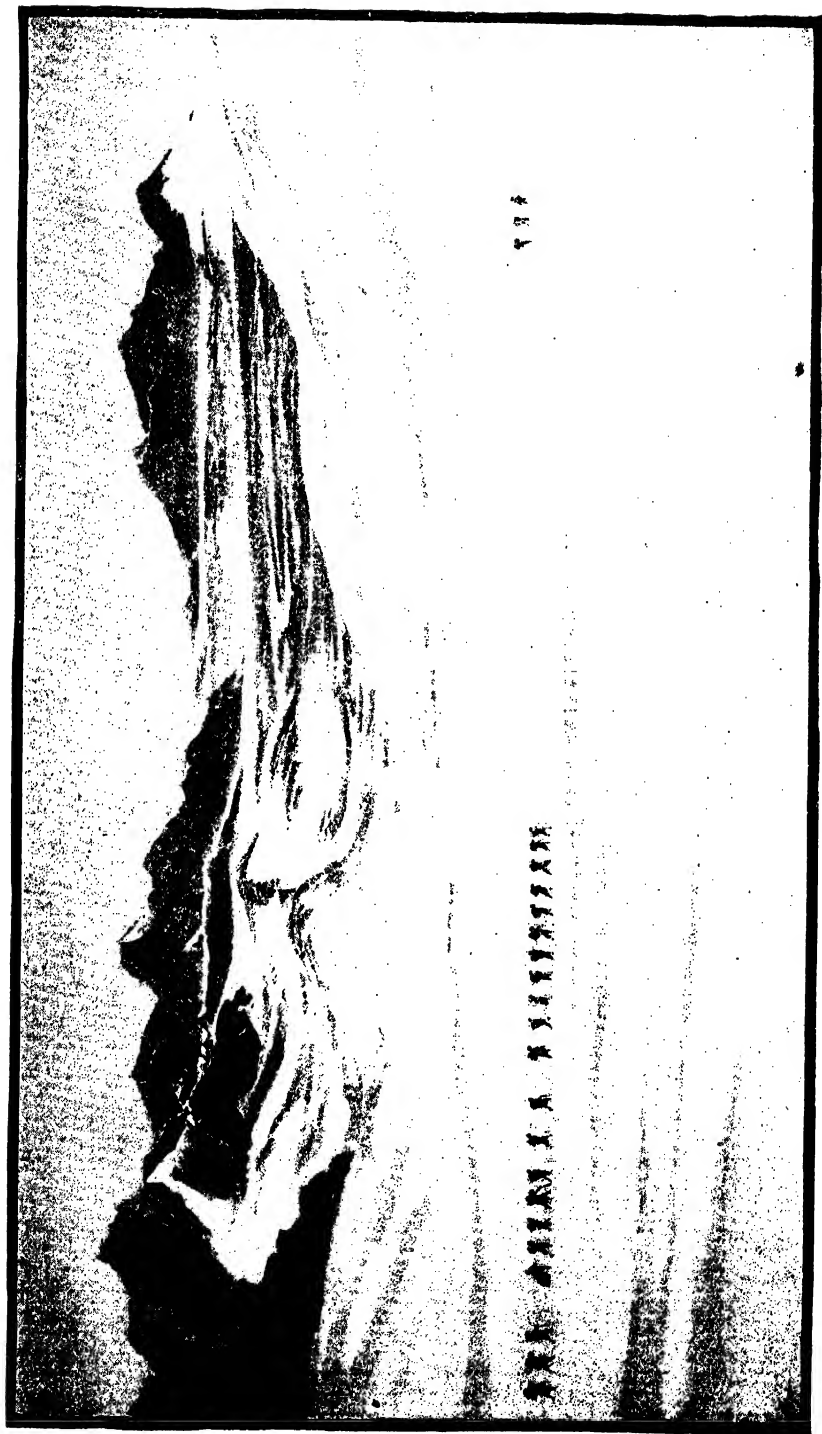
We watched the line of coolies traversing the foot of the hillside—"like a Swiss procession going to some hill shrine," said Zurbriggen, "to pray for rain or fine weather." Presently they reached the junction of a side glacier with the main stream, and, by good luck, the crevasses forced them out on to the ice and close to us. Not knowing what else to do they shaped their course towards us, and with one consent we all cried out, "The pass! the pass! we will go for it at once!" We accordingly called to the coolies to follow, and made straight for the foot of the series of great schrunds that intervened between the level surface of the glacier we were on and the upper plateau that slopes gradually to the col. These could be passed at two places: either far to the right, close under the slopes on the left side of the glacier—a course somewhat exposed to the danger of avalanches—or else near their centre, where a way could be found by a good leader. Zurbriggen boldly chose the latter course and went ahead to take the coolies up.

There was no trouble with them now. They knew they must go over, and each set himself to do his best. In and

out amongst the beautiful schrunds we went, meeting with no point of either difficulty or danger, and in due time we emerged on the upper plateau, with nothing but a gentle snowfield between us and our pass.

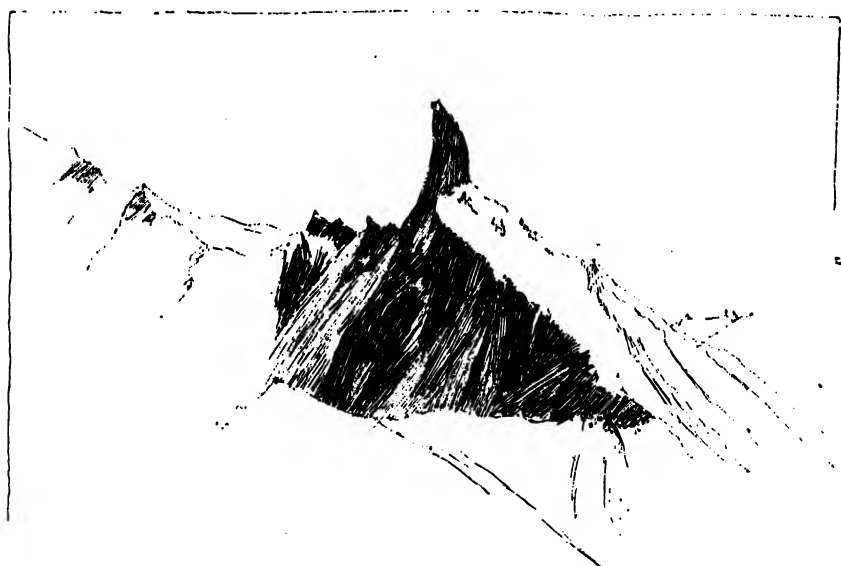
Here I made a long halt to take a last view over the country from which we had come, and which we should probably behold never again. What a glorious sight it was ! The glacier, cut across by the curved outlines of deep crevasses, showing near their lips just a suggestion of blue, dropped steeply away from our feet, leaving for foreground a single tower of ice fringed with icicles and tinted blue on its steepest face. Below the first slope the glacier swept grandly from us in the gracefullest curves, turning one jutting headland after another, and then putting on its dark cloak of moraine and vanishing under it in the far distance. The last tongue of white ice between the mounded beginnings of the moraines looked singularly decorative, and served to connect the upper levels of snow with the lower regions of purple rock and alp. On either hand was a long line of peaks, each stretching an arm down to the glacier, and rearing its crest proudly aloft. The sky was absolutely clear and calm. There was not a movement in the air. One tiny cloud, alone in the blue, floated motionless over the mighty head of Gandar Chish.

We drank in with delight this perfect prospect, with every feature of which the last weeks had been rendering us familiar, and then we turned our backs upon it towards the unknown that would soon be revealed. A long snow-slope was before us, wide and gentle, terminated above by an almost flat line. Beyond this there was the sky, but not the sky alone. One magnificent peak, a pinnacled rock-tower, reared its sharp summit aloft ; cliff above cliff, ridge above ridge, sharp, graceful, defiant, and apparently inaccessible. As we advanced the courtiers of this king of mountains appeared supporting him on either hand.



HISPAR SNOWFIELD NEAR THE PASS.

We could not properly enjoy the wonder and magnificence of this sight. The toil was too great, for the snow was becoming soft, and the plateau up whose gentle slope we had to wade was apparently endless. Wave after wave of long undulating *nevé* was in turn surmounted, but each only made place for another, as long and monotonous as itself. Perhaps the diminished density of the air reduced our forces. We certainly had to breathe faster, or rather more deeply and fully, but we were not conscious of any



ROCK-TOOTH NEAR THE HISPAR PASS.

distinct diminution of strength resulting from this cause. At last we saw the group of coolies seated on the very top of the pass, not far away. On the point of noon we stood beside them and beheld the slope bending down before our feet.

The view ahead absorbed all our attention, for our fate lay in its grasp. It was beyond all comparison the finest view of mountains it has ever been my lot to behold, nor do I believe the world can hold a finer. We expected to look down a long valley such as we had come up, but



VIEW TO THE EAST
FROM THE TOP OF
THE HISPAR PASS

there was no valley in sight. Before us lay a basin or lake of snow.

This lake was bounded to the north and east by white ridges, and to the south by the splendid row of needle-peaks, the highest of which, the Ogre, had looked at us over the pass two days before. From the midst of the snowy lake rose a series of mountain islands white like the snow that buried their bases, and there were endless bays and straits as of white water nestling amongst them. It was the vast blank plain that gave so extraordinary a character to the scene, and the contrast between this and the splintered needles that jutted their 10,000 feet of precipice into the air and almost touched the flat roof of threatening clouds that spread above them.

I forgot headache, food, everything, in the overwhelming impression this majestic scene produced upon me, and the hour and a quarter we were privileged to gaze upon it



HALT ON THE TOP OF THE HISPAN PASS.

passed like the dream of a moment. I did not notice what was going on around. The coolies were seated on the snow, and there was eating of food, and the like occupations, in which I mechanically joined. I am informed that no one consciously suffered from the rarefaction of the air, not even Rahim Ali, a man past middle age, and whose home has been in the Punjab and at Abbottabad. He served tiffin with his usual precision, and took his own food as at lower levels. It should be remembered, perhaps, that on the much lower Burzil pass he showed signs of discomfort from the altitude, and had almost to be carried over the upper part of it. The height of the Hispar pass is 17,650 feet.

The heavy gathering of the clouds warned us to descend. At 1.15 we resumed our course, not without anxiety. I have said that the outlet of the great snow lake was not visible from the col; it was hidden from us by the low ridge close on our right hand. But we could see where it must lie, and there were slight indications of schrunds, which suggested that we might probably find a giant icefall blocking the way against us. We remembered how in all parts of this mountain range there had evidently, in recent years, been a vast increase in the store of snow at high levels. We recalled the various reports that had reached us, of a mysterious blocking of this Hispar pass by some change in the glaciers. We asked one another whether perhaps the level of the lake had not been raised by this means, and an impassable icefall formed at its outlet. Whatever was in sight seemed to favour this supposition, so that I gave the order for advance with no little misgiving.

The heavy clouds now descending upon the mountains had a foreboding appearance, which further tended to depress our spirits. The snowy range away to the north remained white against a belt of blue, but all the other mountains were enveloped in gloomy shadows cast by the smoky clouds. For ten minutes we walked rapidly down a gentle

snow-slope to the top of a series of enormous schrunds, through which Zurbriggen struck an admirable route, discovering, by means of his educated intelligence, a diagonal slope, which led us past them without the necessity of crossing more than one snow-bridge. In fifteen minutes we were on the gently inclined floor of one of the bays of the great lake, and the drooping end of the long ridge, that had been on our right hand ever since we rounded the base of Rakipushi at Chalt, was close beside us. For twenty-five minutes we plodded along through the still excellent snow, then rounded the end of this ridge, and lo ! before our delighted eyes there sloped away, broad, even, and almost straight, the grand stream of the Biafo glacier.

There was no icefall to bar its opening, no break or interruption in its majestic flow. Our forebodings were instantly dispelled, and we cried aloud with satisfaction. I paused to set up the plane-table and sent the others on to look for a camping-place. They found an admirable plateau at a distance of five minutes' walk, sheltered by a precipice from falling stones, and with many cracks and crannies in which the coolies could hide themselves for the night.* We called the place Snow Lake Camp (16,300 feet). When my work was done I hastened to the tents and found everything prepared with its usual precision. But I had to pay a penalty for such a day. The sun caught me in the morning at the plane-table and burnt its heat into my back. A terrible headache prostrated me. Though it was only 3.15 when we arrived, I crawled into my sleeping-bag, and fortunately passed in a couple of hours into a land of dreams, from which I did not emerge till the following morning.

. *July 19th.*—What the minimum temperature may have been during the night I do not know, for I was utterly unable to get out and set up the thermometer on the previous afternoon. It cannot have been very cold, for I

* *Potentilla Inglisii* was flowering on these rocks.



THE DESCENT FROM THE HISPAR PASS.

was warm in the tent without any extra wraps. Still the night was a trying one for the coolies, as it snowed heavily during many hours; fortunately there was no wind. Some of the coolies roosted in a rock cranny close to my tent, and in the morning they called to me with a plaintive refrain, "Oh, *Sahib gi!* the coolies are dying!" They were not really in any such miserable plight, and a few kindly words and nods put them in a good humour. On this, as on several other occasions, I felt the need of light bivouac tents for the coolies. With them we could now have halted at this point for two or three days and explored the Snow Lake. As it was, the men were eager to start down; but that was impossible till the clouds should lift and permit me to make the necessary observations for carrying on the map. Gradually the obscurity that surrounded us diminished, and one snow-crested headland of rock appeared after another, so that about half-past nine I ordered camp to be struck, and at ten we started on our downward way. The old snow was still good under the fresh-fallen mantle, so that we walked at a rapid pace down the easy slope. Away on our left hand was the great lake, looming vaster than ever under the low-lying roof of cloud. Above, to the right, were many wonderful juts and precipices of rock that lost their summits in mist, and became all the more impressive in consequence.

When we had finally left the open lake behind and entered the broad corridor of the Biafo glacier the clouds began to disperse, and we discovered new developments of mountain grandeur about us for which we were not prepared. The glacier swept straight away, broader, leveller, more impressive than its neighbour of Hispar, away to the far distance, where the clouds all but rested on its brown floor, leaving a purple band between. "What a fine maidan!" said Harkbir; and all the men responded, "*Bara acha maidan!*" But the level snow-field would have possessed little beauty, for all its majesty

of size and sweep of form, had it not been the floor of as wonderful an avenue of peaks as exists amongst the mountains of the world. On both sides of the glacier for some fifteen miles they rise, one beyond another, a series of spires, needle-sharp, walled about with precipices, on which no snow can rest, and separated from one another by broken couloirs, wherein tottering masses of snow are for a while caught till they fall in overwhelming masses on the slopes at their feet. The *aiguilles* of Chamonix are wonderful, and possess a grace of outline all their own; but these needles outjut them in steepness, outnumber them in multitude, and outreach them in size. The highest of them flings its royal summit more than 23,000 feet into the air, and looks abroad over a field of mountains that finds no superior in the world. I named the ridge on the north the Ogre's Fingers, and the great peak the Ogre.

After two hours' pleasant walking and some halts for work we felt inclined to lunch. When, after a long halt, we set forth again, we entered on the unpleasant stage of the day's expedition. The snow was thus far in fine condition, but now an occasional foot slipped through the hard crust, and when this kind of thing begins there is always worse in store. It was not merely that we sank into the snow; that is bad enough; but what we sank into was freezing water. The glacier hereabouts is so absolutely unbroken that there is no outlet for its melting. Later in the season the ice may be bare, and then the water will gather into visible pools; but at this time it rendered the snow a soaking sponge. Sometimes there were pools of water ten or more inches deep loosely crusted over with an inch or so of a honeycombed something that was neither snow nor ice. It was useless trying to find a dry track; the thing had to be tramped straight through, and for an hour and a quarter we waded the icy slush in angry misery. The Gurkhas took their troubles with their usual good temper, and only laughed when they sank in deeper

than usual. "*Bara acha rasta!*" they said, and plash! on they went.

At last we came to crevasses, and, for the first time in our lives, were delighted to meet with them, for they swallowed up the water and took it down into the bowels of the ice. About the same time an incipient medial moraine appeared, and we climbed on to it and warmed our feet in the sun. The névé was drawing to an end, and the clear ice was not far away. The coolies, now willing carriers, eager to get down to a region of wood and camp fires, were sent on ahead while map-making was in progress. They were almost out of sight on the far horizon. We began to wonder whether they had not gone too far, for the evening was advancing apace, and the sunlight was becoming tinged with gold.

We put our best foot foremost and hastened over the crisp ice. As we went the most glorious lights and colours played on the peaks and clouds in the east and made us long to linger and enjoy. For weeks the sun had set for us at the foot of the valley we were in; now it set at the valley's head and sent its brilliant light sweeping downwards from behind our backs. Our long shadows marched before us as though they would hasten towards the wondrous east which served as canvas for the sun's bold painting. All the mountains and the clouds, that curled over them like a long breaking wave, were coloured with the richest gold. Shortly after the sun actually set, the foot of the valley was bathed in purple, and the snowy mountain at the end, barred with light stripes of cloud, was grey against a band of bluest heaven. The blue melted into red, which faded upwards to a violet zenith. There was no time to halt, and poor McCormick was almost mad with rage at losing the most pictorial subject that our whole journey had thus far offered. Darkness advanced apace, and we were still far out upon the glacier, nor did we know where the coolies had settled down for the night. At length a voice was heard responding to our calls,

and we steered towards it through a maze of big crevasses. We stumbled over a band of moraine, mounted a short grass-slope, and reached our tents (Ogre's Camp ; 14,230 feet) just as the first stars began to glimmer in the darkening heavens. I dined at once and sat writing until midnight.



PEAKS ON THE EAST OF THE BIAFO SNOWFIELD.



OGRE'S FINGERS, FROM OGRE'S CAMP.

CHAPTER XIX.

THE BIAFO GLACIER.

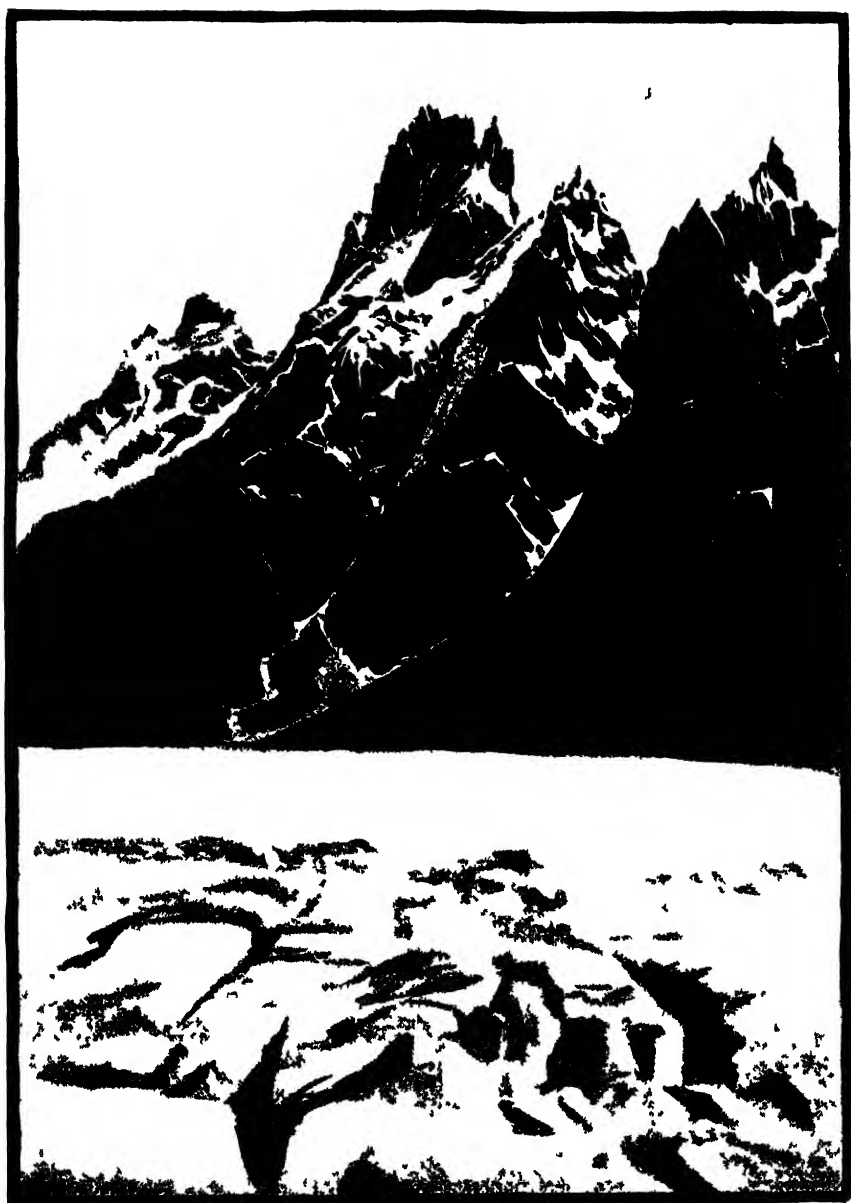
July 20th.—I awoke, fully refreshed, before sunrise, and was able to go on with the arrears of work that still remained to be done. The sun came up in a cloudless sky and at once began to manifest his power. As I opened the tent door the first fly of Baltistan greeted me with an unwelcome visit, and presently a white butterfly fluttered past. The night had been pleasantly cold, the minimum only 29° Fahr. After breakfast I set up the plane-table and worked at the Ogre's complicated Fingers for about two hours. All the time I suffered more from the rarefaction of the air than on any previous occasion. Nor was I the only one affected. We all felt a slight difficulty in getting enough air into our lungs. We noticed that, when the power of the sun is great, the effect of diminished pressure is more perceptible than on a cloudy day at the same altitude.

I set the men to build a big stone-man above the camp, and by eleven o'clock this and all our other work was accomplished, and we were able to lunch preparatory to a short march.

While the packing was going forward I wandered up the rocks behind to the stone-man. The little fertile patch around it was like a garden. Two sorts of tiny gentians brought the blue sky down amidst the grass; there were quantities of Edelweiss and forget-me-nots, of buttercups too, and of other flowers. There were violet Marguerites with yellow eyes, and a tiny white flower, and a little white bell, and Sedums with red or yellow heads, which are never absent from the flowering places at high altitudes; and there were other little plants not yet come to their blossoming.* White butterflies fluttered about, and one orange fellow with a brown border to his wings came hurrying past. The troublesome little flies that made life tedious at Haigutum were here again, and one or two big bumbling creatures made the air hum as they hurried about in their apparently aimless flight. All nature was in motion, and it behoved us to fall in with the general activity. The place was just at the right height for a mountaineer's permanent camp in these regions. Wood for fire was within reach. The air was crisp. There were plenty of good camping-grounds about, the mountains were near at hand, and we were high enough to escape the desperate activity of the flies.

At noon we started away: Zurbriggen and I, for a few hours' surveying on the glacier, McCormick with the coolies to find a camping-ground five miles lower down on the glacier's right bank. I struck straight out across the level ice, and in three-quarters of an hour reached the medial moraine, which is about two-thirds of the way over. Here we were just beneath the glorious precipices of the Ogre, and never did rocks seem to me more magnificent.

* Near Ogre's Camp we found *Mertensia primuloides* and *Gentiana carinata*.



THE OGRE FROM OGRE'S CAMP.

I expected to suffer from the broiling heat of the sun which made the tents intolerable, but the air was cool (45° Fahr.), and a pleasant breeze blowing, so that I found my thickest coat a comfort.

After an hour's halt we went down the glacier by the moraine's side for three-quarters of an hour more and again set up the plane-table. We were opposite the opening of an unexpectedly great fan of valleys that spreads in behind the Ogre and is named Latok. It is split up by jutting ridges into a series of gullies and couloirs, filled with overhanging masses of ice. These ridges contain five great peaks that possess amongst them a wondrous series of true precipices. They are walled about at their bases and various higher stages, the walls, in many instances, appearing to be as smooth as a city paving-stone from bottom to top. The peaks are all of the Meije type, but, reckoned from the glacier up, at least double its size. One of them could be climbed by a remarkable shelf of snow that curls spirally around its broad straight flanks, and seems to give access to a kind of Glacier Carré, whence a possible, but difficult, series of couloirs would conduct to a sharp arête and so to the top. I called these peaks the Five Virgins.

At half-past three we put away work and started off for the new camp. We descended the glacier, gradually traversing it to the right, and constantly crossing streams of water, crystal clear, flowing between snow-white banks. Never have I seen so pure a glacier as this. The ice is as clear as that which freezes on the surface of a still pool of water in an English park. Thus the beds of the little streams were all blue and transparent, and made the water look like a blue ribbon twining about the glacier's white surface. Stream united with stream in babbling descent till they formed rivers thirty feet wide or more. One of these I was forced to follow for some half-mile, because I could not cross it and join Zurbriggen on the opposite side. Its channel gradually deepened, and its banks grew to be about twenty feet high. At length it met its fate in the

form of a small crevasse into which it must fall ; but, in falling, the rush of waters had hollowed out a great well (or moulin, as it is properly called) for themselves, and down this they plunged with headlong turmoil. The walls of the well were of purest ice and shimmered with, as it were, a blue phosphorescence, so beautiful that I think its loveliness cannot have been made to be for ever wasted on the sightless stones that alone are privileged to behold it before they tumble into its awful depths.

But where was the camp ? That was the question we kept asking one another. Not apparently on this headland, and certainly not on the next, for there was no wood there. We climbed the crest of one of the numerous moraines that now divided us from the glacier's right bank, but could not see further than the next moraine ridge, and the same was the case when we mounted that. We shouted aloud, but who could hear us in the midst of these immensities ? Then we started wandering further down the glacier, only to halt and shout and hear nothing, and wander on and halt and shout again. The sun was lowering to the west, and caused us to wonder whether we might not be compelled to spend the night out, with no tents to cover us and no food to eat. I was becoming tired and rather unwell, while the difficulty of breathing was worse than ever, the fact being that I was a little overworked, and so less able to adapt myself to the strenuous surroundings. At last we sat down on a stone to smoke and sent Harkbir ahead to look for the camp. He entered the broad and much crevassed moraine band, and disappeared from view. Presently we thought we saw him far away on a stony mound, but the glasses showed that it was a coolie planted on the look-out.

We hurried off as fast as the difficult nature of the ice would permit, and at 6.15 reached the tents. They were pitched at the foot of a theatre of grass-slope on the flowery bed of what had been a lake, and with two pretty lakes close by, caught between the ridges of two old moraines.



ADONIS

THE BIAFO SNOWFIELD, LOOKING BACK FROM NEAR OGPE'S CAMP

The place looked charming, and we were for calling it Twin Lake Camp, but on further experience of its demerits we called it Boggy Camp (13,570 feet), for damp and boggy it was. At sunset I caught a chill and retired early and miserable for a night of little sleep. As I tossed about, the glacier's thousand rivulets sang their ceaseless soothing song. The contrast was great between this habitable region and



BUILDING A STONE-MAN AT BOGGY CAMP.

the unspeakable silence of my midnight waking in the solemn level of the great Snow Lake above.*

July 21st.—It is sometimes a man's duty to do nothing, and that duty this day was McCormick's and mine. We lay in our tents from morning till night, our nearest

* We found at Boggy Camp *Doronicum Falconeri*, *Polygonum viviparum*, *Stellaria Webbiana*, *Gentiana carinata*, *Cerastium trigynum*.

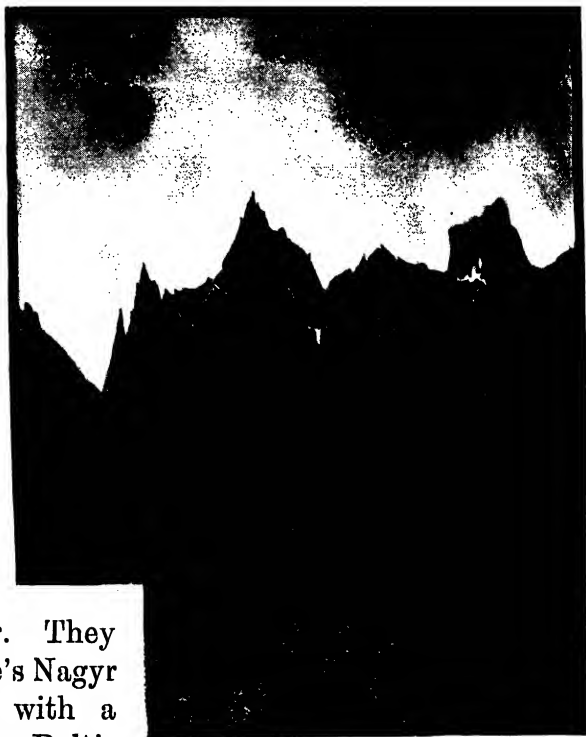
approach to occupation being to read the advertisements in an ancient number of the *Field*. We should doubtless have been bored, notwithstanding the splendour of our surroundings, but for the flies. These gave us ceaseless occupation, and our ears grew red with self-inflicted boxings. At an early hour we sent Zurbriggen off to Askole for tobacco and the other necessities of the simplest existence. He reached the village late the same evening. The day's rest did us both infinite good and restored our tone, for I was overworked in an entirely London-like fashion. Towards evening we felt as though we had taken a six-weeks' holiday, and we turned in early to prepare for an active morrow.

July 22nd.—McCormick and I started at 6 a.m. for a day's surveying on the glacier. We crossed the belt of moraine in twenty minutes, and walked straight up the smooth ice for an hour and a quarter, till we came in sight of our stone-man at Ogro's Camp. We made a long halt and did a good deal of work. Unfortunately clouds were gathering on the summits of all the higher peaks, so that the map suffered considerably, but one has to be content with doing the best that circumstances permit. We next steered towards the mouth of the Latok glacier, and in about an hour became involved in the crevasses and moraine accumulations that cover a large area where the two glaciers join. We ultimately reached the left bank of the Latok glacier and climbed on to a delightful grass-slope, a portion of a splendid alp, which, I believe, is called Angorosa Blok. Here we settled down for lunch.

The Latok glacier divides into two branches a very short way up. One of these branches leads round behind the Ogre, and is bounded on the north by splendid peaks, which have an ecclesiastical appearance and reminded us of ruined Gothic cathedrals. In front of one of them stands a perfect apse of gigantic proportions, with a white roof and a rounded back of smooth vertical rock. The other branch of the glacier bends to the east behind the low ridge that was opposite to us at Boggy Camp. Its end is backed up against the

Dumultier glacier. The last we could see of it was the lower portion of a huge icefall curling round the corner.

After lunch we went to the angle of junction of the Latok and Biafo glaciers, and there found a ruined and ancient stone-man, covered with brilliant orange lichens.* Whilst I was working at the plane-table the others searched for game, and presently descried bears, which, however, on closer examination, proved to be men. They were apparently resting by the side of a lake between the left moraine of the Biafo glacier and the hillside. When my work was done we started towards them, and, by following a well-marked path, came up with them in three-quarters of an hour. They proved to be Bruce's Nagyr coolies, sent up with a couple of strapping Baltis to assist us. The Baltis told me that the lake place was called Gomun, and they applied the name Rdzong, or Fortress, to the upper regions of the Biafo glacier.



PEAKS WEST OF THE BIAFO GLACIER.

We set off together to return across the glacier, by way of a huge glacier table which I observed planted on the

* The following were found near the stone-man at the angle of the Latok glacier:—*Saxifraga flagellaris*, *Sempervivum acuminatum*, *Gentiana borealis*, *Allardia glabra*.

very top of the chief medial moraine. We reached it without incident in half an hour, and I again did some work at its foot. Then we made for camp. Both McCormick and I were feeling feeble and unwell, for some unaccountable reason, and on reaching camp we found Rahim Ali and his help in a prostrate condition. Rain began to fall soon after our arrival. Whilst we were on the glacier it was raining or snowing on the upper levels, and great misty besoms were sweeping over the icy flat between us and the craggy peaks, producing wonderful effects in the fitful sunshine. As the evening closed in, clouds and damp miasmas gathered about us, and we retired miserably to our tents for the night.

July 23rd.—There was no question about the weather to-day. It was unspeakably bad. A warm night (min. 41°) was followed by persistent rain, which was falling when I awoke, and continued falling all the forenoon. As I would not leave without getting sights to certain points, which had thus far been continuously hidden, there was nothing for it but to lie idle in our tents. At last, by seizing favourable moments, I was enabled to accomplish my task in an indifferent sort of fashion, and at 3.15 p.m. we started. I ordered the coolies to cross the glacier and pitch camp a short way down the other side. We again traversed the wretched band of moraine in the usual twenty minutes and halted some distance beyond on the open ice to take a round of angles, for the clouds were threatening to blot out everything once more. A quarter of an hour further on new and important points came into view, which had to be seized before they were overwhelmed in mist. About five o'clock we reached a point whence we expected to at least descry a coolie on the look-out near camp; but none was in sight, and there was no answer to our call. We continued the descent of the glacier, therefore, keeping a sharp look-out on the left bank.

Thus far, from the level of the great Snow Lake, the glacier had been broad, even, and of gentle slope. Its

noticeable peculiarity is the regular way in which it is stratified longitudinally. One can walk for hundreds of yards along one of the edges of its upright strata as along a board. We were now approaching the point where the glacier is narrowed and its slope steepens. The narrowing does not interfere with the regularity of the stratification, but the strata are squeezed together, and they rise in undulating longitudinal ridges or sink into ruts, making yet more emphatic the glacier's peculiarity. The lateral moraines here begin to make inroads on the white ice. The space between them is not only rendered uneven in the manner described, but is broken transversely into great waves (not crevasses), about 20 or 30 feet in height from hollow to crest, and very regular. The slope of the wave facing the foot of the valley is gentle; the other face is steep and often vertical, so that progress becomes difficult and fatiguing.

We went forward as fast as possible, getting more and more angry with our men for going so far beyond the appointed distance. It was useless stopping to survey. We should be benighted if we did. The only thing was to gain camp quickly and return up the glacier on the morrow. At last two men answered our shouts and came hesitatingly towards us. They almost fled when they saw our angry faces. They proved to be messengers from Askole with a letter for me. They told us that our camp was pitched on the other bank and about three miles lower down. When they observed the effect of their remarks upon us they turned and fled. We followed them as fast as legs would carry us, and presently we met two more coolies, also coming from Askole, laden with stores for us. Heaven knows whither they thought they were going, for they had passed the camp and were wandering in a general way upwards, looking neither to the right hand nor to the left.

Down we went, faster and faster, skurrying through the crevasses in our anger. At last we saw the smoke of the camp fire and discovered with disgust that we were separated from it by more than a mile of stone-covered and crevassed

ice. We set ourselves to cross the hateful area with all possible dispatch, breathing out threatenings and slaughter as we went. For now the sun was painting the glorious mountains in the east with a splendour of rich colour that made McCormick furious. His colours and his blocks and all his apparatus were with the tents, and he was for a second time deprived of a golden opportunity by the stupid haste of our servants to get down to their luxuries. We swore that every man of them should to-morrow retrace each step of the stony way and bow his face to the earth in the place where the camp ought to have been. At last our hateful march came to an end. We scrambled up a slope of moraine and came to a flat, damp maidan, called Mango Brangsa (12,600 feet), the usual old pond basin, where at 7.15 we found the tents pitched and every one delighted to see us and eager to make us comfortable. Tobacco had come, sheep had come, she-goats were there to give us milk, and flour to make bread for us. Our ill-temper dissolved away, as morning clouds in the mountains seldom dissolve, and after dining on chickens and other dainties, not out of tins, we went to bed at peace with the servants, the coolies, and all the world. Zurbriggen is reported to have said in London that I never lost my temper in the mountains; he did not see me on this occasion.

July 24th.—An unpromising morning, which fully justified its evil look as the day advanced. Being tired after the fatigues of yesterday, we did not leave camp till eight o'clock. We crossed the band of moraine to the clear ice, which we mounted by a better route than we had followed in the descent, avoiding the largest series of waves and traversing only gentle undulations. In three-quarters of an hour we reached our first station, and, after a sufficient halt, we ascended to a second in twenty minutes more. Further than this it was not necessary to retrace our steps. Near us on every side were an extraordinary number of glacier tables of all shapes and sizes, recently fallen from their pedestals of ice. It looked as though the glacier had

shaken itself and upset them all at once. There must have been some hundreds of them thus overthrown.

When we started from camp the clouds were gathering in the sky. They joined themselves together and formed a roof, which slowly descended and enveloped the summits of peak after peak in the order of their altitude. The Five Virgins were early hidden, and it was only by much hurrying that I was able to get my work done at all. Presently a dark veil of rain and cloud came sweeping down the glacier, and we saw that all views were over for some hours. So we turned to retrace our steps. When we were in the midst of the glacier's stony border the rain came down and urged us to still greater rapidity. In a few minutes we reached the camp's welcome shelter. On and off for all the rest of the day the rain continued to fall, and the clouds blotted out the peaks, so that it was impossible to continue our downward journey.

After lunch I called the Balti coolies to the tents and began questioning them as to the names of points by the side of the Biafo glacier. One of them was a remarkable-looking fellow, the same that we met by Gomun Brangsa Lake. His square, dark face, with the black hair standing up above it in spires, like a terrier's cropped ears, and his powerful peasant form, haunted me since first I met him. Where had I seen the man before? At last I recalled the place, as in a vision of the night. He is one of the attendant shepherds in a picture of the Nativity, by the great Bramantino, which hangs in the Ambrosiana Gallery at Milan. I was glad to make his acquaintance in the flesh, and to find him altogether a decent kind of person.

The inking in of the map, the writing up of diaries and letters, the arranging and cataloguing of specimens filled the remainder of the gloomy afternoon. From hour to hour a cuckoo kept calling from the rocks above camp, and great stones were continually booming down the hill-side or rattling off the glacier's surface into the crevasses. The wind, sometimes bearing, sometimes opposing the sound

of the streams that flow about the ice, made a sougning, as among the trees of a forest. Little birds were chirping from the rocks; so that though there was not much to be seen in any direction, Nature's music was not hushed.* After sunset we hoped that the weather would clear, but our hopes were doomed to disappointment. Swirling wreaths of soft grey cloud wandered around all the peaks, and filled the valley with a purple gloom. The naked rocks of the many ridges, that jut out one beyond another down the opposite side of the valley, with their clearly marked stratification and various tinted bands, assumed all manner of rich colours, and compensated for the loss of the clear view of precipitous peaks and needles, to which we were looking forward. Eventually darkness and rain returning together, drove us early into the tents and extinguished the smouldering remnants of our camp fire.

July 25th.—It was a horribly wet night, and the morning that followed was so cloudy that I was not at first able to take the needful sights. Eventually, however, the clouds lifted here and there, and at a quarter to ten we started on our downward way. We walked for a few minutes between the moraine and the hillside. At the inevitable side glacier we had to cross the stone shoot below its foot. To our delight, however, there was a trodden track among the stones, and all went well till we came to the foaming torrent. One of the coolies, in trying to help me over this, landed me thigh deep in the water, and it was hours before I dried. Our party was much larger than when we crossed the pass, for we not only had our own men with us, but there were the Balti coolies, and others sent up by Bruce, and there was a flock of eleven goats and some sheep (already dwindled to two) and the shepherd that drove them,

* The following were found at Mango Brangsa:—*Gentiana detonsa*, *Pleurogyne carinthiaca*, *Gentiana borealis*, *Aconitum Napellus* var. *rotundifolium*, *Allium blandum*, *Tanacetum Senecionis*, *Salix* near *S. flabellaris*. *Taraxacum officinale* was found a little lower down on the right bank of the Biafo glacier.

the shepherd of the Nativity—I knew he must be a shepherd, but only now found evidence of the fact. In the evening he divided the sheep from the goats, but killed the sheep, contrary to precedent. The goats formed a charming addition to our camp. They were confident, friendly little creatures, who never got in the way and were always picturesque. They trotted along before the coolies, nibbling a herb if they had the chance, or leaping from stone to stone with the leisureliest certainty of foot. In camp they browsed



A FALSE STEP.

between the tents or lay on grass-patches among the rocks.

During the morning a batch of Bruce's coolies met us. They were on their way back to Nagyr, and had been told to cross by our pass, but when they saw us they ran almost weeping towards us. "We don't know the way! we don't know the way!" they cried; so we added them to our swelling numbers and took them back to Askole, whence in due time they returned home with their fellows.

At the next side valley we quitted the right bank of the

glacier, again following the indications of a path, and struck out towards the fast narrowing strip of clear ice in the midst. The stony surface to be crossed was not so bad as it might have been; besides, much practice had rendered us indifferent to moraine-covered ice, and had given a facility in hopping from rock to rock. There was a strong stream of water flowing along the edge of the clear ice. We followed it till it reached its end, where it plunged into a grand moulin, of perfectly spiral form. The water curled round and disappeared down the blue funnel, leaving a slender spire of ice upright in the midst.

After walking for an hour and a half, and spending two hours in halts for surveying, we came to a convenient tiffin place. When we started off again a gentle rain was falling, but fortunately it did not last long. We came to a point where the glacier has to bend round a corner, and in doing so is forced over a headland on the right bank and thereby broken up into great crevasses. These were avoided by a *détour* to the left, after which the strip of clear ice we were on ended, and we had to incline to the right and make for the bank. We were all tired, and welcomed the sight of a flat shelf of grass, close to the foot of a protecting precipice of rock, which offered an admirable camping-ground. We sent the men on to pitch the tents, and found everything ready when we arrived, shortly after four o'clock. The name of our camping-place was Nambla Brangsa (11,700 feet).

The view from the tents was superb, and aroused our warmest admiration, jaded though we were with the appalling splendours of the scenery we had been passing through. The mountains that border the upper stretch of the Biafo glacier are, as has been stated, characterised by an extraordinary uprightness of form. As one descends the glacier those on the right become snowy and rounded, though with many a needle gracing their sides and crests; but those on the left preserve their steepness. When the

group of the Five Virgins recedes from the immediate neighbourhood of the main glacier, a low and rounded grass ridge at first takes its place, but this soon puts on more emphatic forms, and presently juts into the air with the same abruptness as its greater fellows, further within the sanctuary of snow.

Our camp was opposite the boldest front of this lower ridge, and its splendid walls and crags, its blades and pinnacles of rock, its deeply recessed couloirs and glaciers, hanging with apparent insecurity on giddy shelves, were all displayed right over against us. The rocks were for the most part too steep to hold snow, and there was not a scrap of earth or *débris* accumulated anywhere about them. Every loose fragment seemed to come tumbling down at once on to the glacier, which carried it steadily away. The rocks were striped with a many-coloured stratification, cutting through the mountain from ridge to ridge. All around their base, for perhaps 1,000 feet, they were polished smooth by the once much deeper glacier. The whole of this mountain pile, thus wonderfully built and decorated, shone golden before our eyes in the light of the lowering sun, and was projected against a clear, blue sky. A few soft clouds played about the hood of snow that crowned the actual peak, and now and then became caught in one of its deep cut gullies, thus adding to the changefulness and mystery of the scene. Presently there was a feast of colour on the mountains in the east which withdrew our attention from the precipices opposite, and then the night came on and the spangled canopy above gave a final salutation before we closed the world out behind the frail drapery of our tents.*

July 26th.—The morning was again cloudy, but this mattered little, for we were nearing the foot of the glacier, and all we actually needed to observe was the lower promontories that plant their feet in the Braldo valley, and

* At Nambla Brangsa we found *Silene Moorcroftiana* and *Sedum Ewersii*.

whose summits the clouds usually disdain. Starting a few minutes before eight, we struck diagonally across the glacier towards the thin remaining band of clear ice that offered the best downward route, for the right bank again became precipitous, and the glacier near it, wrenched around

another corner, was broken into big crevasses. We reached the clear ice in half an hour, and then turned down it, but it rapidly narrowed and became the mere course and banks of a stream; stones protruded through it with increasing frequency, until we were walking from stone to stone, with ice between. At length the waters found their fate in a deep moulin, and the last bit of ice disappeared under a mantle of moraine.



MANGO GUSOR FROM THE END OF THE BIAFO GLACIER.

The coolies went ahead and set up little stone-men as guides to lead us through the wilderness. At one place they came across a great boulder, poised on the top of a glacier ridge, and on it they built a large *Tamarei*, doubtless intending

it to endure for eternity; but the moving ice, though they knew it not, will soon overturn it, and the memory of it will not long endure. At last, after an hour and a half's walking, we left the glacier for its right bank, and there, by the side of a little stream, found our men awaiting us with tiffin. We were practically at the foot of the great glacier, and our long expedition was nearing its close.

The Biafo glacier opens out at its end into a kind of fan. No longer imprisoned between the walls of its gorge, the ice spreads to right and left over the flat sur-

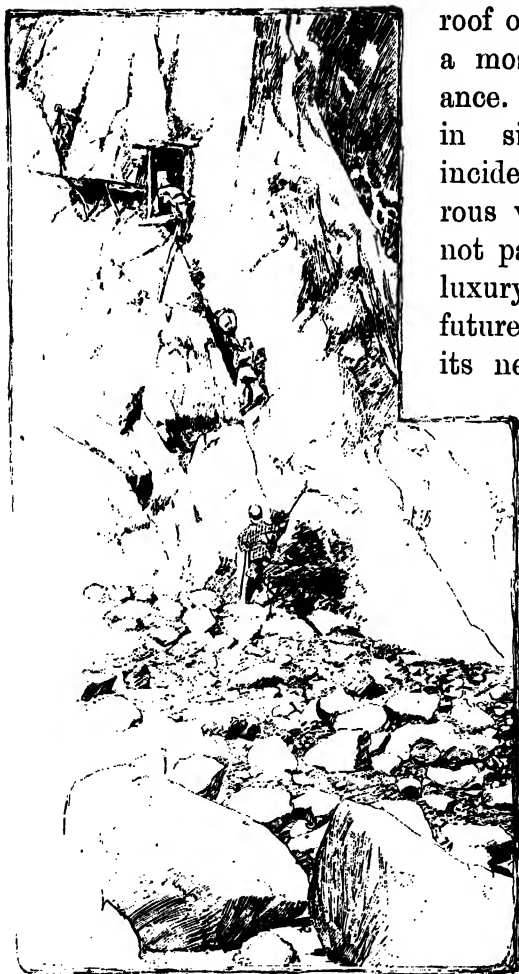


FOOT OF BIAFO GLACIER FROM LASKAM ZIGZAGS.

face of the Braldo valley. At one point only is the free action of its failing strength impeded. A mound of rock, a detached portion of the right bank, stands up in the way of the ice and bars its passage. Formerly the glacier calmly flowed over the impediment, but now it must stop behind it and content itself with pushing a feeble arm between it and the mountain side. It was by this arm that we quitted the ice, and it was on the bank of the stream from it that we sat down to lunch.

When our repast was over we mounted (it only took ten

minutes) to the top of the intrusive rock,* and took a last view up towards the cloudy regions which had been the scene of our hopes and fears for two weeks. The avenue of precipices, with its floor of stone-covered ice, sloping up to the white



THE GREEN PARRI.

fields behind, and a dark roof of cloud over all, had a most impressive appearance. Each crag and bend in sight recalled some incident of our adventurous way. But we could not pause long in the mere luxury of memory: the future was before us with its needs for action. Before quitting the point I set up a wooden post in the remains of a ruined stone-man, which we repaired.

We ran down into the gully again, and descended it towards the plain. As we trod its rough floor, on stones of every form and description, I could not but meditate on the various places whence they had

come. This one perhaps formed the proud summit of a lofty aiguille, and gazed far abroad over the mighty

* We called it The Nose. *Anaphalis virgata* was growing among the *débris* on it.

lake of snow. That came crashing down some steep gully, or over some frowning brow at which we had gazed in admiration. All in their turn certainly fell from aloft, and made brief thunder in their descent; then, buried in the bosom of the ice or poised on its surface, travelled their slow journey down to its foot and were cast over into this narrow trough, there in due time to be ground to powder and carried away by the river. Past Skardo and Bunji they would go, and through Chilas, down and down, till some day their dust would be spread by flood over the fields of the Punjab, and would help to make fertile low-lying fields and lands cultivated by busy men.

The descent of the gully only took ten minutes to the flat pebbly ground by the right bank of the Biafo stream. And now that we were in a barren valley once more the evilly-disposed sun scorched us, and, as below Hispar, made our lives burdensome. We passed through a gap in a transverse wall between the river and the hillside, built, I suppose, to keep the cattle from straying, and in half an hour we came to the place where the Biafo stream joins the waters from Baltoro and Punmah. The combined rivers flow at once against the foot of a precipice on our side of the valley, and this precipice had to be surmounted by a cleverly constructed but giddy path. The rock is a beautiful green serpentine. The passage of the *parri* took about fifteen minutes, the path descending on the other side, but not quite to the river bed. Half an hour further on we crossed the foot of a fine waterfall, over which a mud-avalanche had recently fallen. We drank deep draughts of the dirty waters and went forward refreshed.

The cultivated fan of Askole was before us; we bent all our energies to traversing the desert tract that intervened between us and its promise of shade. We soon came to the edge of cultivation, where two old watch-towers guard the approaches to Askole from the east. The only use they can ever have been was, like the fortified

parri, to protect the village from invading parties coming over either the Hispar or the Mustagh passes. Ten minutes later we reached camp in the *bagh* (10,360 feet), and found Bruce and Zurbriggen awaiting us, and our extra baggage safely arrived from Srinagar.



ASKOLE.



IN CAMP AT ASKOLE.

CHAPTER XX.

ASKOLE TO BALTORO.

July 27th-30th.—Of our four days' halt at Askole little need be said. For most of us it was a very busy time. There was a large mail to be made up and sent home (it never arrived); there was the baggage which came direct from Srinagar to be overhauled; there were many things no longer needed to be packed and sent away; and there were all the arrangements to be made, and supplies to be laid in, for a five weeks' expedition up the Baltoro glacier. Quantities of things had to be mended, and Zurbriggen was fully employed. A detail of his work was to nail and clout some twenty pairs of boots and shoes.

Bruce had been for some days at Askole, employing part of his leisure in attempting to stalk ibex, but he found no big heads and so shot nothing. He came with Eckenstein from Skardo by way of Shigar and the Skoro pass—a route we afterwards took, and which will be described

in a later chapter. Bruce found all the streams in flood, and had much difficulty in fording them.

Since leaving Nagyr we had seen no trees of any size, and we had not encamped in a *bagh* since Gulmet. Askole therefore seemed a very paradise, for our tents were pitched within a walled enclosure and shaded by willows and poplars, which framed beautiful views. Graceful Mango Gusor between the trees was a particularly charming object. The green foreground of cultivated fields soon drove out of our minds the hot desert and the stony glaciers.*

The day after our arrival, Mr. Douglas Churcher (87th Fusiliers) came in from the Punmah valley, where he had been shooting. He pitched his tent beside ours, and gave us the unwonted pleasure of company. With banjo and song he graced our evening palaver, but I think that, when the rest of us howled in chorus, the mountains must have prepared avalanches for revenge. When we sang—

“ We love you all,
Petites or tall,
Whate’er your beauty or your grade is,
Coy or coquettes,
Blondes or brunettes,
We love you all, bewitching ladies,”

a mental reservation had certainly to be made with respect to the hags of Askole—a most ill-looking lot, so far as we could judge. Churcher only stayed one night with us. He went off down the valley to fresh hunting grounds, where, by good luck and skill combined, he put together the best set of trophies that fell to any sportsman in Kashmir during the season of 1892. I saw and admired them at Ambala a few months later.

I held several conversations about passes and topography with the natives of Askole and with Wazir Nazar Ali, who

* About Askole we found *Medicago lupulina*, *Medicago falcata*, *Brassica campestris*, *Fagopyrum tataricum*, *Silene conoidea*, *Saponaria vaccaria*, a species of *Atriplex*, and a species of *Artemisia*.

was to leave us at this point. Their information was worthless when put to the test.

Colonel Godwin-Austen, writing in 1864, says of the Hispar pass, "It was by this way that the Nagyr men used to come into the Braldoh and loot the villages; their last raid was some twenty-four years since (*i.e.*, about 1840), when a body of from seven hundred to eight hundred crossed over, and carried off about one hundred men and women, together with all the cows, sheep, and goats they could collect." I inquired about this story every day I was in Askole, and

was informed as follows: 'The last time there is any memory of the pass having been crossed was in the days of the father of the very old man in whose house our baggage was stowed. He does not re-



EXAMINING WAZIR NAZAR ALI.

member the event, but he remembers his father telling him about it. The leader of the band that crossed from Nagyr was Wazir Hollo. They came late in the year, three months later than now. The harvest in Nagyr had been bad, and the Nagyr folk needed provisions. The band did not attempt to attack Askole, said the old man, but the Baltis gave them ibex skins and flour. The Nagyr people invited some of the Baltis to go back with them, but they refused, fearing the cold. The Nagyr men started to return by the way they came, but all perished in the snow except Wazir Hollo, who alone reached home to tell the tale. There is, perhaps, a

fragment or two of truth in this story, but the actual facts will probably never be discovered.

The Askole men also said that long before Hollo's expedition the Nagyr people came over the Hispar pass and brought with them a Shoti, who built the stone hut called *Lancum i Brangsa*,* and decorated its roof with ibex horns, or made the roof of them. The hut still exists somewhere by the Biafo glacier.

Our camp was a perfect Babel for languages. Besides English and Hindustani of sorts, Zurbriggen communicated with Bruce in French and with me, as the humour took him, sometimes in German, sometimes in Italian, for he lives astride of the linguistic frontier. In addition to these there were spoken amongst our followers Gurkhali (of two sorts), Persian, Pashtu, Kashmiri, Panjabi, Yeshkun, Shina, and Balti. At least five of these tongues were always going at one and the same time.†

Eckenstein had never been well since reaching Gilgit. It was evidently useless for him to come further with us, so I decided that he had better return to England. The winding up of my arrangements with him delayed us an extra day.

July 31st.—After four days in a stationary camp it is not easy to start on the wander once more. The first day, with new coolies, is always something of a compromise between staying and going; at all events it was so on this occasion. We did not feel inclined to wake early; the packing was slowly finished; we lingered over breakfast, and the coolies loitered about the adjustment of their burdens, protesting against the weight of this and that. So it was 8.35 a.m. before the last man left Askole Bagh.

It was a wonderfully fine morning, and I for the first time

* *Lancum* means "leather-worker" in Balti. The Shotis are leather-workers in Nagyr, as has been stated above.

† The following are a few mountain words as used at Askole: Valley, *angorosa*, *lumba* or *lungma*. Alp, *brok*. Camping-ground, *brangsa*. Glacier, *gang* or *gans*. Snow, *ka*. High mountain, *ri*. Precipice, *ding*.

had leisure and mood to discover the elements of grandeur in the situation of this remote village. The sun was well up, but did not yet look over the steep western faces of the hills, and left dark the precipitous eastern wall, lined all over with the many-coloured edges of folded strata. All the shadows on the much-ravined hills were deepest blue. The grand pyramid of Mango Gusor flew a white flag of cloud towards the south, whilst in the foreground the tiny bright leaves of many poplars glittered in the sunlight, as Corot would have loved to see. A cool breeze played up the valley, so we retraced our steps to the foot of the Biafo glacier without the miserable discomfort that attended us down. In two hours' walking from camp the end of the gully was reached, by which, five days before, we quitted the Biafo glacier. We passed under the precipitous southern face of the Nose, which McCormick and I had climbed, and so we reached the edge of the glacier (10,230 feet) in ten minutes. We scrambled on to its stony surface and proceeded to traverse it in a direction parallel to its foot; but we found that a mere abstinence from moraine walking for only four days had deprived us of much of our recently acquired facility of progression over this kind of rough ground. For three-quarters of an hour we traversed the stones and then stepped on to a level place at the foot of the ice (10,120 feet), where there was a lake separated from the tumbling waters of the Biaho by a narrow rib of half-formed moraine. The place for our camp was but a short distance ahead, and so, like fools, we sat down for a tolerably long halt and shelter from the sun.

A few yards further on, as we found out when we started again, there were a couple of rushing torrents to be crossed, an overflow from the Biaho river, which pours into and again out of the lake. We must either wade these torrents, or retrace our steps and go all the way round by the stony glacier, which meant not only a long *détour*, but a considerable ascent. There was no time for hesitation; the river was rising visibly from moment to moment, and submerging

stone after stone that might have been used for jumping from. Bruce, the lightest clad, at once took to the water and got over. He had to push hard against the current



CROSSING THE STREAMS BELOW THE BIAFO GLACIER.

in the middle, where it was up to his waist. He said he would carry me over, and came back to do so; but when we were in the deepest part a stone turned under his foot

and down we both plumped, so I had to wade after all. McCormick followed, and the Gurkhas and Bruce made two or three other journeys to bring the instruments over without risk of wetting. Arrived at the far side we sat down to dry ourselves, and, what with the hot sun and the wind, soon became comfortable enough. But on starting to go forward again we came almost at once to a second stream, which was broader and icier than the first. We plunged through it, and then through two smaller ones before the whole series was done with.

While the drying process was being performed over again, Zurbriggen joined us, having taken nearly an hour to make the necessary *détour*. He was dry, but he was not happy, for he had just made an unpleasant discovery. His only tobacco-pouch was left behind at the edge of the furthest torrent. Bruce at once volunteered to go back and fetch it. Off he ran through all the streams, but the water was now breast-high in the deepest places, and it was all he could do to fight his way back.

Twenty minutes beyond the last stream we found the huge smooth-sided boulder which is the recognised camping-ground of the stony waste called Korofon (10,360 feet), a triangular slope of glacial and water-rolled *débris* that fills the space between the left bank of the glacier and the hill-side. We dried our clothes on the hot stones, in the hungry period that intervened between our arrival and that of the slow, heavily-laden coolies.*

When Godwin-Austen was here in 1861 the Biafo glacier abutted against the rocky foot of the mountain mass called Mango, and the Biaho river flowed beneath it. Now the glacier has so far retreated that the river flows in open daylight, and has stony plains exposed on either bank, the foot of the glacier being about a quarter of a mile short of its old

* The following were gathered between Askole and Korofon :—*Echinops cornigerus*, *Cotyledon leucantha*, and a species of *Cynoglossum*. At Korofon we found *Acantholimon lycopodioides*, *Ephedra monosperma*, and *Orobanche Hansii*.

position. I could discover no clear signs of the ice advancing again; indeed, the contrary seemed rather to be the case. These trifling variations in the length of a huge



COOLIES AT KOROFON.

glacier like the Biafo are, however, of little account. The Biafo glacier is, under any circumstances, small compared with the mighty system of ice-rivers that once flowed down these valleys. There are visible traces of ancient glaciation

all the way up the north slopes of Mango to a height of at least 3,000 feet above the present level of the valley. The glacier that made them must have been an affluent of that large ice-river, which once drained all the high snowfields of the south side of the range of mountains we had been visiting, and, reaching as far as Skardo, there deposited the famous hills of moraine by which all travellers are astonished.

During the march I unwisely walked without my coat, and with the sleeves of my jersey turned up. The sun found out both weak points, and burnt the skin of my arms and touched me in the spine, so that I suffered in the evening both from a smarting sunburn and a slight sun-fever and headache. I could not sleep, and found the air stifflingly hot. The thermometer showed it to be only 62° Fahr. at 11 p.m., which indeed is sufficiently warm for a place over 10,000 feet above sea level, and within a quarter of a mile of a glacier. I wandered out from my tent, and was drawn on by the loveliness of the night. All the camp was still—the seventy coolies, ten lambadhars, four Gurkhas, three servants, Bruce, McCormick, Zurbriggen, all seemed to be asleep. Pristi moved about from time to time to see that all was right. The twenty sheep and twelve goats were lying down in their pen. No breath of air was stirring. The thunder of river and glacier rolled on in constant volume of sound. The young moon, low in the west, whitened the rock wall of Laskam (up which lay my morrow's route), and cast upon it the black shadow of Mango's stately pyramid. Eastwards, as it were caught in the valley's notch, Jupiter blazed bright between the hills. Presently a haze spread itself abroad over the sky, betokening further heat rather than bad weather, and with it at last came the promise of sleep, followed by swift fruition.

August 1st.—We started at 7 a.m., the object of our day's march being merely to reach and cross the Ghore-samakar rope-bridge in the Punmah valley. The direct way

to this point would naturally be to walk round the foot of the hill called Laskam, that fills the angle between the Punmah and Biaho streams. But, except in winter, the track round this angle is difficult, and involves rock scrambling too difficult for laden coolies ; so the summer way is over a col in the Laskam ridge, reached by an ascent of about 2,400 feet, and a descent of almost as much. McCormick and I chose this route for the sake of the view and the chance of adding to the collections.* Bruce and Zurbriggen preferred the lower road, by which they reached the bridge in three hours of easy walking. The day was an excessively toilsome one for me, as I was still suffering from the sun, and, though the early morning was hazy, mid-day and afternoon were frightfully hot. McCormick and I crossed in ten minutes to the foot of the west wall of rock that supports the rounded greenish slopes of the Laskam ridge. We mounted the wall by Gemmi-like zigzags in three-quarters of an hour, and we strolled leisurely over the slopes above, catching many butterflies † and finding some flowers. We reached the Laskam pass (12,730 feet) in about two hours from the tents. From the high alp we enjoyed interesting views, first over the foot of the Biafo glacier, and then up various side valleys, and towards sundry minor peaks of various ridges ; but there was only one object of striking grandeur worth special mention, and that was Mango Gusor. From the Biafo glacier and from Askole we learnt to know this peak as a grand pyramid, formed, as it were, out of three great slabs of rock lying on one another, tilted up at a high angle. Now, however, we looked along the axis of the mountain and beheld its unexpected narrowness. It was not a pyramid, but a fang, sharp, upright on both sides, and apparently, though not really, inaccessible. The descent to the bridge was down a sandy slope, and occupied little time. We reached the

* On the Laskam slopes we found *Morina persica* and *Orobanche indica*.

† *Epinephile pulchella*, *Hipparchia lebana*, and *Hipparchia parisatis*.

foot in three-quarters of an hour, and found Bruce and Zurbriggen awaiting us. Bruce had been here a few days before and found the bridge in so bad a condition that one of his coolies fell through it, and only saved himself by an agile grip. The thing had been well patched up in the meantime. It still hung unpleasantly loose, and therefore steep at the two ends, while the water flowed fast beneath, but it could not be called a bad bridge. We were all soon over. Half an hour later the coolies arrived, in

number now reduced to seventy, for the ten lam-badhars were all sent back to their villages this morning. As the sheep and goats and the dog had to be carried over on men's backs one by one, there were in all 103 loads to be brought across. Only one coolie carrying a kilta,



MANGO GUSOR FROM THE
ROPE-BRIDGE.

or any of the more important pieces of baggage, was allowed to be on the bridge at a time, and we found that the passage of a laden coolie took five minutes. Later on two or even three used the bridge at once, otherwise the afternoon would not have been long enough to get everything over. As it was it took four hours and a half before the work was done. We pitched camp (10,700 feet) a couple of hundred yards lower down the left bank of the Punmah river, and then existed in misery and enforced idleness till the sun went behind the western hill. As soon as his hateful beams were withdrawn the

temperature sank, in the tents, from 85° to 75°. But it was not the air temperature that hurt us, it was the blazing and scorching of the sun's direct rays. The very moment they are withdrawn relief is felt, but unfortunately our single-fly tents were too thin for protection against our great enemy.

August 2nd.—We left camp near the Ghoresamakar rope-bridge at 6.20 a.m., and, going down the left side of the Punmah valley, came in five minutes to the edge of a side torrent. The previous night this was an insignificant stream, which could be crossed by hopping from one stone to another; to-day it was in flood. We set the coolies to cast stones into its deepest parts, but the waters carried them away as fast as they were thrown in. Zurbriggen then got out the climbing rope, and Bruce, McCormick, and a Gurkha succeeded in carrying the end across. With this fastened from bank to bank, and the Gurkhas, and often Bruce, standing thigh-deep in the icy stream to help, we succeeded in convoying all the coolies over. The stream was still rising, and the last coolies, when they did not fall down, were at least waist-deep in the swift torrent. Bruce was here, there, and everywhere, manifesting his usual abundance of energy. He carried over about half the sheep, taking them one by one under his right arm, while with the left he grasped the rope in the deeper places. At first he carried two sheep, but the rising waters prevented any further exploits of that kind. We marched ten minutes and came to another, but fortunately unswollen, torrent, beyond which were the usual sandy and stony wastes. Travelling for an hour over them, we gained the junction of the Punmah and Biaho valleys.

Every one was glad to be at this point, for there were no more ribs to be climbed over or big rivers to be crossed. We were counting the hours to the foot of the Baltoro glacier and the pleasant regions of ice and snow. Our two and a half days of marching had thus far brought us no more than eight miles from Askole, as the crow flies, and we



CROSSING A FLOODED TORRENT IN THE PUNMAH VALLEY.

were only about two miles from Korofon, so that it was a relief to have a straight valley before us and no special difficulties to encounter.

We advanced up the Biaho valley very slowly, for there were many plants in seed, and we had to gather our little botanical harvest. Moreover, a tantalising profusion of butterflies tempted us on all hands, but I fear we were not nimble butterfly catchers, for most of them eluded the net. One big fellow, striped yellow and black, with black-tailed wings, was not uncommon. We knew him well, having seen him often in Nagyr, and even as high as Mir Camp. He flies as fast as a bird, and appears never to alight—at all events he never did in our neighbourhood.

For the first hour in the Biaho valley the track led over stony maidan. The sun was growing powerful, and we deeply regretted the time lost in crossing the flooded torrent. The coolies walked incredibly slowly, so whenever there was a shady rock we halted beneath it. After the maidan came a fan from a gully above on the left. This fan was ploughed up by a score of small, straight-sided, dry gullies which bore marks of a mud-avalanche having come down and about them not long before.

It may here be mentioned that almost every gully, not actually filled with glacier, passed by us since leaving Hopar bore similar traces of a mud-avalanche fallen this season, and I have little doubt that, just as down every couloir, that reaches to the level where snow lies deep in winter, there falls in spring at least one snow-avalanche, so down every steep gully that is, for part of the warm season, at any rate, the course of a rapidly flowing torrent, there comes, and must come, a mud-avalanche. Nor is the reason far to seek. The lower slopes of this mountain district consist of great precipices or slopes of bare rock with vast accumulations of *débris* against or upon them. The heat of summer and the cold of winter annually loosen a certain thickness of the *débris* by the sides of the gullies, cut in the *débris* slopes by the torrents, that drain

the high snow patches and come rushing down over the naked rocks above. Many of these torrents run dry before the summer is half over, but in June and the first part of July they are active. On specially warm days these torrents are in flood, raging against the banks that hold them in, and deepening their courses. Then it is that the stuff loosened by the frosts and heats falls into the foaming waters from either side (as we saw in the gully below Hispar), and a mud-avalanche is formed. The day the Hispar mud-avalanche fell we also saw the wet traces of others in every gully we crossed, and, not improbably, it was on or about July 8th that all the similar gullies in this range of mountains were the tracks of similar descending masses of mud and rocks.

Beyond the first fan there was a second, equally tiresome to cross, and then another stony tract, after which we came to a stream of delicious water. It descended from above, in the narrowest possible cleft, cut, by what once was a waterfall, deep into the face of a cliff of rock that rounded away out of sight under the sky. There was still a cascade at its foot, and shelter from the heat in a cool grotto hollowed out by the waters.

Beyond this point there was no longer any, or only the narrowest, space between the hill-slope on our left and the river on our right. Above was the cliff, or rather a steep and exceptionally smooth slope of naked rock, surmounted by a threatening mass of *débris*, now rapidly being disintegrated and cut up into earth-pyramids. In springtime, or during wet weather, these must pour showers of fragments over the cliff and into the river below, and then the route we followed must be dangerous or almost necessarily fatal to a traveller; but, when we passed, everything was baked as dry as an old crude brick.

For a time the way was merely rough and unpleasant. A point came where we had to choose whether to follow the river's edge or to mount slightly and traverse the steep slope above. We selected the former alternative, and were

thereby kept hopping from stone to stone, or scrambling round corners, till a scramble upwards became a relief. On the slope we struck a faintly marked track, which was bad enough, and by it at noon we reached the overhanging rock and the little stone shelters which go by the name of Bardumal (11,000 feet). Slow as our progress had been, and often as we halted, we knew that the coolies must still be far behind, and that a hungry waiting was before us. They did not, in fact, arrive for a full two hours. We crawled into the shadow of the big rock and passed the time as patiently as we could.*

There was no view to delight the eye, for the valley thus far is probably the ugliest in the world. The hills that border it have no beauty of form, and are bare. We noticed a few high alps, and observed with interest that wherever there was a patch of grass there was also a track leading up to it. Over against us was the opening of the Shinkan valley, across whose end stretched a long rounded spur, thickly covered with grass-grown *débris*. Behind this spur must once have been a lake, but the Shinkan river has cut a gate through it, and this gate was the most striking object in sight. But the view lost all its dulness when the coolies with the provision kiltas at last began to appear round the corner.

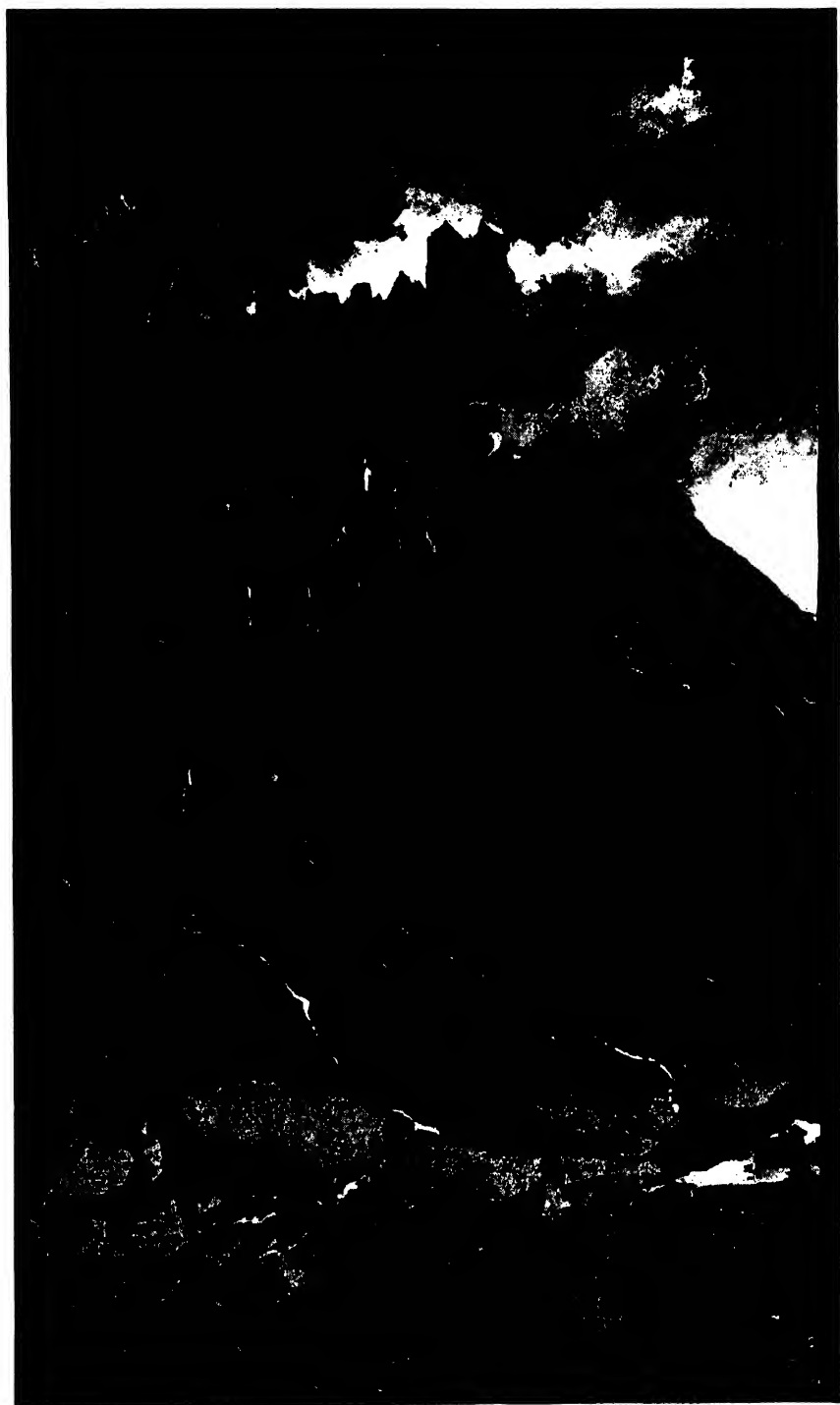
The usual lunch and hot afternoon followed, and then the sun took his welcome departure, and the cool air was revealed. In the evening I sat outside the tents in the lightest attire, and found satisfaction in the grandeur of the wide darkness of the valley under the bright moon, poised above the edge of the mountain to the south. The valley bottom, a level expanse of rushing rivers and broad wet sandy islands and banks, from which the waters had just retired, cast the moonlight back towards me from a million changing facets. With renewed faith in the everlasting and all-pervading beauty of Nature I retired for the night, early and content.

* *Lactuca tatarica* was growing here.

August 3rd.—We started at 6.20 a.m., determined to reach the foot of the Baltoro glacier and have done with hot and hateful valleys. The sun was already streaming upon the path when we left the tents, but the air was delicious. The path was bad from the very beginning, and led across a steep rubbish slope, where the eyes had to be unceasingly fixed upon the next step. What with the peak of one's pith helmet in front, cutting off all the upper part of the view, and the need for constant attention to the foothold, the changing views could receive little attention. Fortunately they were worthy of little, till we turned a corner and beheld ahead mountains of fine form, ghostly bright in the eastern radiance. The sunlight glanced off a bit of ice-slope here and there as from a mirror. The whole mass was enveloped in a dazzling haze that softened every form.

From a stony maidan that followed we beheld, high above us to the left, a sharp row of rock peaks, whose outline was like that of Rochester Castle. The end of the great Baltoro glacier lies at their foot. We pounded steadily along while the cool of the morning lasted, sometimes traversing steep slopes of dry *débris* that crumbled under our feet and slid down to the roaring flood below, sometimes striding from stone to stone by the water's edge, sometimes traversing soft plains of sand and pebbles, or crossing rough fans of *débris* and dry mud, formed and deeply furrowed by the spring torrents from the gullies above. In two hours we reached the first considerable side stream, where we rested a while. Ten minutes further on we crossed another. A bit of glacier, which was evidently part of a tributary of the Baltoro, came in sight far ahead, but it was not till 9.35 a.m. that the foot of the great glacier appeared.

We traversed more sandy maidans and scrambled over a steep *parri*, from the top of which the view of the glacier was extremely fine. Width was its noticeable feature, and the row of precipitous peaks behind it, looking down on its



ROCHESTER CRAGS FROM THE BALTORO VALLEY.

curving right bank. The visible sides of all of them seemed hopelessly inaccessible. Opposite, on the south side of the valley, were also fine snowy peaks sending white icefalls down the side nalas. Beyond the *parri* we descended once more to the riverside and reached a charming island of uncultivated fertility.

Clearly at some time there was a settlement here. I questioned the coolies about it when they came up. The first I asked replied that as this was not his grazing valley he knew nothing about the places in it, but he would fetch a man who did. From him I learnt that the place is called Poin, and that it was a summer settlement where the people came to wash gold out of the river, but they ceased to come when the river changed its course. The abandoned patch, with its degraded, self-sown corn, its old fruitless apricot trees, its ragged willows and rose-bushes, and other flowering shrubs, all tangled together, made a charming shady wilderness. We enjoyed the unwonted luxury of lying on grass beneath trees, and hearing the tinkle of a brook close at hand. The main body of the river at this point flows a mile off along the far side of the valley's flat.

We started on at noon, crossed another *parri*, and descended to the last maidan, which reaches as far as the glacier's foot. It was the usual sandy and stony plain, but not wholly barren. There were several clumps of rose-bushes, a few lines of low trees, and some patches of grass out of which the Gurkhas put up a couple of hares. At the far end of the maidan, close to the glacier's foot, were two more oases of grass and trees, and it was in one of these, under shelter of a great rock (11,580 feet), that we chose a place for Baltoro Camp. We reached it at 1.15 p.m., and the coolies were only an hour behind.*

I went forward to reconnoitre the foot of the glacier, and

* The following were found between Bardumal and the foot of the Baltoro glacier:—*Eurotia ceratoides*, *Hippophaë rhamnoides*, *Arnebia hispidissima*, *Potentilla Salessovii*, *Allardia nivea*, *Heracleum pinnatum*, *Lactuca decipiens*, and a variety of *Allium senescens*.

to see the thundering river (bigger than the Rhone at Visp) coming out of the black ice-cave. The foot of the Baltoro glacier is unlike that of any other known to me. Most glaciers seem to lose all their energy at their foot, where, if they have space, they spread out into a sort of jelly-fish termination. This, for instance, is the way with the Biafo; but the Baltoro is busy to its close. It consists of three longitudinal divisions, of which the most northerly is white and crevassed, the central covered with light grey moraine matter, and the southern with dark greyish-brown moraine.



FOOT OF THE BALTORO GLACIER.—I.

These colours arise not from any single kind of rock, but from the mixtures. The central division, sweeping round to the north, cuts off its white neighbour, or rather squeezes it into insignificance, but the southern division is the most important and energetic. It is thicker than the others, and its high rounded surface looks down upon them. It descends in vastly greater volume, and protrudes more than half a mile beyond the rest into the valley, spreading out and threatening in its turn to bar across the end of the central division as that does the end of the right. In

recent years the two smaller affluents may have, and probably have, retreated somewhat, but the southern division keeps its snout steady, just touching the edge of a fan below the mouth of a side valley. If it advanced it must invade this fan and leave marks of its presence, but the fan, which is an old one, shows no traces of any such disturbance. I made a careful observation of the present position of the glacier's extreme snout, and painted the prismatic compass bearing on the rock by which we camped.



FOOT OF THE BALTORO GLACIER.—II.

August 4th.—The coolies asked for a day for sewing *pabbus* to protect their feet from the ice, and I was not sorry for a little repose after my failure to get any at Askole. Early in the morning, however, the coolies sent a deputation to say that it was one of their "great days," and might they go down the valley to say their prayers?—a request instantly refused as far too likely to be an excuse for bolting. The morning was hot, but enjoyable, for there was long grass to lie in, trees to cast shade, and cool air blowing from the glacier; we extended ourselves on the ground in perfect idleness,

listening to the noise of the rushing waters and letting the hours flow by.

A loud crash aroused us from our lethargy. We scrambled up a mound and saw that a huge mass of ice, hundreds of tons, had fallen from the end of the glacier into the river. It dammed back the waters for a moment before breaking up into many icebergs, which the swollen waters tried to carry away, but soon left stranded in the shallows of the various streams, into which the river early divides. The largest block remained at the mouth of the cavern where it



THE BIG STONE FROM BALTORO CAMP.

fell; about a hundred minor blocks were stranded about, all of them too heavy to float in a raging torrent at least $2\frac{1}{2}$ feet deep. This will give some idea of the size of the original fall. The Gurkhas said that a similar fall occurred in the night, and

that, after it, a great wave came down the river and nearly swamped their sleeping-place, which was ten feet above the level of the stream. That fall changed the course of the waters and swept away a large sandbank near our camp, on which we had been able to walk in the evening of our arrival.

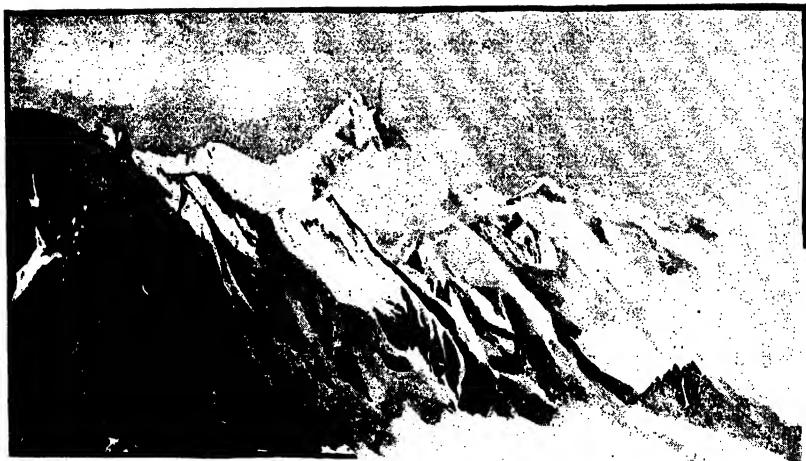
After breakfast Bruce and two Gurkhas summoned up energy to go and explore the way on to the ice. The other Gurkhas made their bread for two days. They amused themselves by baking in the Balti fashion, first heating in the fire a lot of rounded stones the size of cricket-balls then

covering them with a layer of dough, and rolling them into the wood embers till the cooking was finished.

At noon, when Bruce returned from the glacier, the heat was intense, the thermometer registering 100° Fahr. in the shade of the big rock under which the tents were pitched ; but perhaps a little reflected sunlight may have reached the instrument and made the reading a trifle too high. About lunch-time a thick curtain of clouds overspread the sky, and a few drops of rain fell, necessitating a hurried gathering of our possessions, which were spread about on the grass in picturesque confusion for a sun-bath. I slept most of the delightful afternoon away, and only aroused myself at tea-time to go on with the endless task of writing.



IN CAMP, BALTORO.



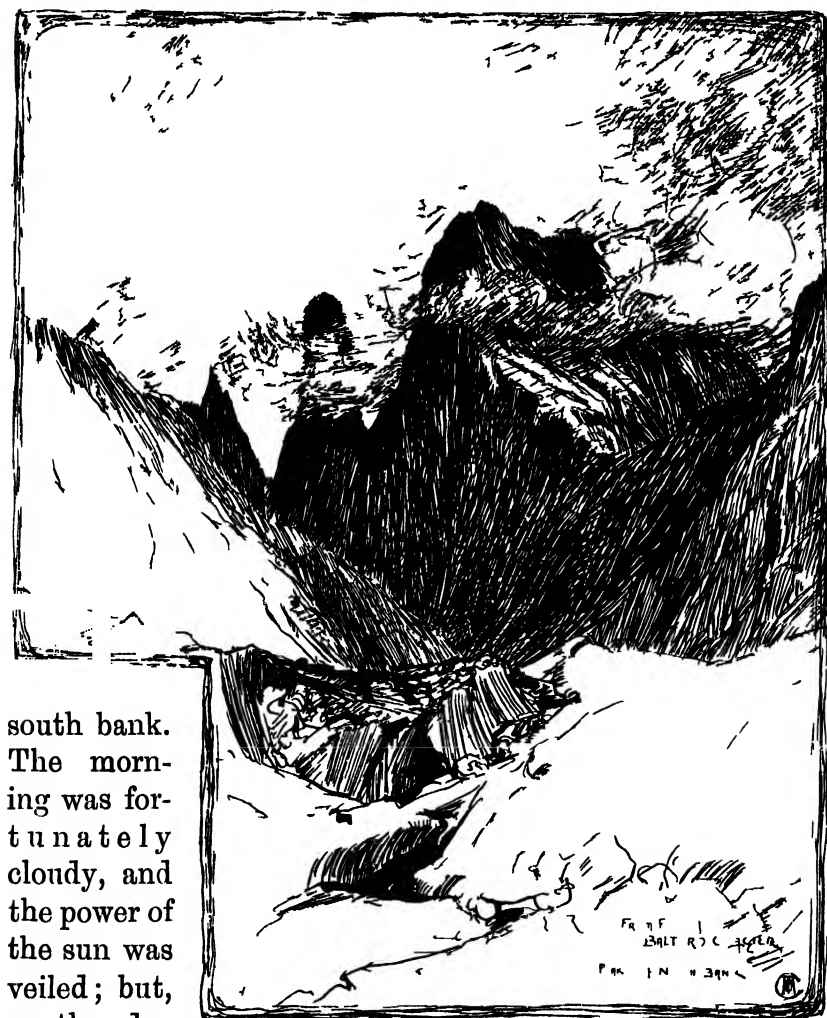
MASHERBRUM FROM THE SLOPES OF CRYSTAL PEAK.

CHAPTER XXI.

ASCENT OF THE BALTORO GLACIER.

August 5th.—Starting at 5.35 a.m., in ten minutes we reached the foot of the glacier, where it rises from a flat *débris* expanse, at a slope of 27°. The coolies were put in charge of Parbir and Amar Sing, who led them well. Parbir, always eager to experiment on novelties in clothes, was this day shod with Balti pabbus, to which he gave a qualified approval, but he did not use them again. We scrambled in five minutes up the steep end of the ice, and at once began the pounding up and down over stone-covered and very mounded glacier, which was to be our work for many days. Of course we outwalked the coolies, and were obliged to make (not that we minded) plenteous halts for them. We first followed the grey or central division of the glacier, but after twenty-five minutes bore to the right and took to the brown or southern division. The grey moraine was all large and much tumbled about, but the

brown was stabler, much of it broken very fine, almost pounded up, and there were a few flowers growing amongst it. The mistake here made was in not bearing over to the



south bank. The morning was fortunately cloudy, and the power of the sun was veiled; but, as the day advanced, blue sky be-

LOOKING UP BALTORO GLACIER, PEAKS BY THE NORTH BANK.

gan to predominate and the clouds became soft and bright in the sunlight. They hung lazily about the steep peaks and rocks on the north, and bent gracefully over from the southern ridge.

I have spoken of the peaks to the north as steep. They consist of a series of precipices and terminate aloft in needles. We were becoming accustomed to this build of mountain, but had not seen such fine specimens, for form, as these. They are built of the same rock and in the same style as the Five Virgins of Latok. Perhaps some of them might be climbed by the remarkable galleries that surround them and may afford communication between accessible gullies at different stages. The slopes on the south of the glacier are rounded and in many places grassy. They are not precipitous nor even steep.

After an hour's walking we considered ourselves well on the glacier. We were opposite the middle of the first side glacier coming in from the north, a clear mass of ice, little encumbered with moraine and descending in a fine icefall from a cliff-bound basin. The nature of the work that was before us and the kind of glacier to be tackled were now revealed. The Baltoro glacier is narrower than the Biafo (except where precipices crowd that through straits), and not so wide even as the Hispar. In many respects it resembles the Hispar more than the Biafo. Like the Hispar it is very stony, broken into vast mounds (one I roughly measured was about 200 feet high) and pitted with many lakes. It is therefore extremely troublesome to mount, for one cannot go up either of its banks, but must traverse the wearisome surface.

Wandering up by devious ways we were soon out of sight of one another. Shouts and jödelings resounded over the ice, and Pristi busied himself hurrying from one to another as though to bring his flock together. McCormick and I had good reason for not wanting Zurbriggen out of our sight, for we were again short of tobacco and depended upon him for an occasional smoke. Once we suggested a cigarette when he was not smoking himself. "Ah!" he said, "I am like the St. Bernard dog, at Simplon Hospice, that used to carry a basket down over the snow in winter to the village of Simpeln, and bring it back with

meat in it. One day a great many other dogs of Simpeln saw him going off with the meat, and they followed him and attacked him for it. And when he saw that they were too many for him, and would certainly get and eat the meat, he said to himself, 'Nay, if my master's meat is going to be eaten by these dogs, I too will have a share of it!' and therewith he and the other dogs set to and devoured the whole. And so," said Zurbriggen, "if you will smoke my tobacco, I must smoke also." I have since found the same story in Luther's "Table Talk" and in Mademoiselle Vacaresco's "Rounanian Folk Songs."

From the time we were opposite the first (nameless) glacier from the north we walked two hours before coming opposite the second, called the Uli Biaho. It is a flat glacier, enveloped in moraine for the six miles or so of its visible course. At its head is a low and apparently easy col, which, from the map, should lead to the Feriole branch of the Punmah glacier. We went pounding along up and down over the endless stones and in and out among the big mounds. Resignation was the only possible attitude of mind, for there were days of this sort of work before us. "In Switzerland," reflected Zurbriggen, "if one has to go for an hour over moraine *so flucht Mann*, but here one walks over it the whole day and says nothing."

At 11.30 we climbed over the top of a very big mound and descended to a lake on the other side, where we halted to await the coolies and eat some lunch. The Gurkhas set to playing ducks and drakes (*Dunga terni*, "a crossing stone," they call it) with bits of flat stone lying about. We spent the time in talking about the mountains we hoped to ascend. Zurbriggen was full of expectation. He was in the anecdotic humour. He related an incident which occurred when he was once crossing the Adler pass with an Englishman, in bad weather. A well-known Zermatt guide, noted for his plain-spoken rudeness to any bad walker that has the misfortune to engage him, was crossing the pass the same day, and the two parties came together. The Herrs were

both English and fell into conversation, and the other said to Zurbriggen's—"I'm not afraid of the weather, or the pass, or the new snow, or of avalanches on the final slope,



PEAKS NORTH OF THE BALTORO GLACIER.

but only of my terrible guide." "I tell you this," said Zurbriggen, "that you may tell young climbers that they need not be afraid of me."

After waiting about an hour and a half we were at last

joined by the coolies, and at 2.30 they were able to start again. We only walked about an hour further and then were all quite tired out. We thought of making for the left bank of the glacier to camp, but on turning to do so found that it would involve another good hour's work, and we wrongly thought that we should have to retrace our steps the following morning; so, as the coolies were carrying enough wood for one night, we determined to camp where we were (13,010 feet). The Gurkhas found a gravelly spot in a sheltered place for the tents. It was about 5 p.m. when they were set up; an hour later rain began to fall, and the evening closed in miserably enough.

While we were waiting for the coolies we sat on a high mound and surveyed the view up the glacier. The peaks immediately on our left were impressive, with their bare straight sides on which neither snow nor loose stones can rest. But ahead was the object that riveted our attention—the great mass of Gusherbrum butt end on towards us. Zurbriggen curtly pronounced the nearest peak (26,016 feet) utterly inaccessible, as far as could be seen; it might “go” by the south arête if that could be reached by some route hidden from our point of view, but no visible part was climbable. The hinder peak was a graceful snow-pyramid (26,378 feet), of which, however, only the highest portion was visible; but the base of the pyramid must be approached from the valley of the Oprang river.

The rain, which began as a drizzling shower, soon settled down to business. The wind rose, and the first part of the night was wretched for the fireless and shelterless coolies. The Gurkhas had Zurbriggen's small tent, and he slept in mine. About midnight the rain ceased, but cold set in, though fortunately not frost. What with the noise of wind and rain I found it hard to sleep, and passed a restless night.

August 6th.—We started at 7.20 a.m. for what proved to be a wretched walk. The morning was fairly fine and the clouds were picturesque enough, but once on our way we had eyes only for our footing on the horrible stone-covered

ice. We marched for five hours and a half, always over stones, going up a glacier mound and then down its far side, or carefully winding around its slope on treacherously loose stones, which often gave way and displayed the sloping ice beneath when we were least prepared to maintain our balance. Undoubtedly this glacier far surpasses in



ICE-CAVE ON THE BALTORO GLACIER.

discomfort, and in the size of its mounds, both the Hispar and the Biafo. They are a Piccadilly promenade to it. There can scarcely be in the world anything more loathsome monotonous and fatiguing to travel over. And what made matters worse was that, when we had climbed to the top of an exceptionally high mound, and could see from it

about two days' journey up the glacier, there was still nothing but stones in sight, so that the hope of better things deserted us, though even then we did not know the worst.

We made many halts and pauses to take note of our surroundings, which were always striking, and to photograph the various side valleys with their glaciers, as we came abreast of each in turn. Gusherbrum showed itself now and again far ahead, and once he was barred across with some half-dozen lines of white cloud, through which the outlines of his form could still be perceived. When half the march was over we encountered such undercutting streams as delayed our progress on the Hispar glacier. The crossing of one of them gave us much trouble, but it had to be accomplished, for our camping-place was on the far side.

Bruce struck out a route for himself early in the day, and the coolies made for the right bank and were lost to our sight. When opposite the mouth of the Piale glacier, up which lies the route to Younghusband's Mustagh pass, we were fairly worn out, as well as faint with hunger. We could see no promise of a good camping-ground anywhere on the right bank of the glacier, but ultimately we set off and crossed in that direction, hoping to intercept the coolies and at least get something to eat. Fortune was, however, kinder than we expected, and had reserved for us a sandy camping-ground in the bed of a partially dry torrent, at the west angle of junction of the Piale and Baltoro glaciers (14,120 feet). We were informed that there are some old huts at the east angle and intended to push over to them, but it seemed doubtful whether there would be any brushwood there, whereas there was a sufficiency, at least for one night, at the west angle.

When the tents were pitched, a storm of rain and wind came sweeping up the valley, as on the previous night, but lying on our backs in the tents, we were in no humour to complain of what might go on outside. Towards sunset there was a clearing among the clouds, and, right opposite to us across the glacier, the veil was swiftly drawn aside and

disclosed the glorious form of Masherbrum (25,676 feet), his summit rocks golden in the sunlight, and grand skirts of snow sweeping down to the glacier beneath. The highest



THE DURIN GLACIER FROM THE BALTORO.

point stood out like a jutting buttress towards us and appeared inaccessible from this side. The long arête descending to the east is likewise impracticable, for it would involve climbing over a whole range of peaks ; but all that we could

see of the north-west arête might be climbed. It does not descend immediately from the highest point, but from the west shoulder (25,627 feet), which is connected with the summit by a fairly level ridge. As the sun set the clouds gathered about the peak again and we saw it no more.

August 7th.—At last I had a good night's sleep, the first for a fortnight or more, the fact being that we only now reached again a decent level for human beings to live at in these regions in the hot weather. It rained on and off all night, and was raining when I awoke in the morning, so that our start was delayed and we did not get off till a few minutes before eight. We went directly over the foot of the Piale glacier to its other angle, where there is a mud maidan and a glacier lake. We could find no trace of the old huts there, which I understood from Younghusband that he had seen. Clouds were everywhere low down, so that we had no view of the Mustagh pass. For the rest of our march, which was only four hours in all, we followed the edge of the main glacier, going sometimes along the foot of the hill, and sometimes on the edge of the stone-covered ice, or the rare ridges of moraine it has found space to deposit. We were now and again exposed to the possibility of being raked by falling stones from the glacier, but on the other side the rocks were perfectly firm—a long, almost unbroken slope of crag reaching up at the angle of the dip of the strata as far as the eye could follow.

At the angle of the Piale glacier the scenery of the Baltoro changes. From Baltoro to Piale Camp we marched up a deep and gloomy trough, with appalling precipices on our left hand, and, on our right, broken slopes, named Zazur, with their hanging glaciers, falling from the north-west outliers of Masherbrum. But at this point we entered an opener region. There were no more impending needles to the north, whilst southwards a magnificent snow-faced mountain-mass of great breadth, and gloriously decorated with avalanche slopes, steep couloirs, and hanging glaciers, looked down upon us. Further on, this snow faced *massif*

is divided into a series of deep couloirs by monstrous blades of smooth rock edged with needles.

In twenty minutes from the Piale glacier's east angle we reached the foot of a little gorge which disclosed, a few hundred feet up, the snout of a small glacier. A short way further on came a grassy maidan, where we found numbers of little blue butterflies (*Polyommatus pheretes*, *amphissa*, and sp. near *hylas*) sleeping till the sun should shine again. Here a torrent of considerable volume flows between the hillside and the glacier. It drains the next side glacier we were coming to, and, after running beside the main glacier for a certain distance, it finds its way on to it. This was the stream that impeded us so much the previous day. Its end is dramatic. It flows into a vast amphitheatre of ice, about 100 yards or more in diameter and at least 200 feet deep, and at the bottom of this it plunges into a moulin and is heard and seen no more.

We had to choose which side of this stream we would take, and, hating the stone-covered ice with a deadly hatred, we chose the hill side, and chose wrong. We soon came to a place where a rock precipice abutted against the stream and had to be climbed over. This was followed by another, and then by a third, and the last could not be passed. So, after all, we had to wade through the water and take to the stone-covered ice, just at the west angle of the foot of the valley containing the next considerable side glacier. It was hereabouts that we saw, for the first time, a specimen of a lovely little bird; he was apparently black in colour, with red wings edged with black, which, when opened for flight, appeared to be of a semicircular form.

We scrambled on for an hour more, till heavy rain began to fall, and then we took shelter from it under a big rock, in crouched positions, the pavement of our resting-place consisting of large pointed stones of the most uncompromising character. Above it was the foot of a gully affording accommodation both for a waterfall and for occasional avalanches, one of which had recently fallen. As



MASHERBRUM FROM STORAGE CAMP.

soon as the weather lifted a little we walked on over similar ground for an hour, and thus, about 1 p.m., reached the mouth of the next glacier valley, where we determined to pitch the tents. The glacier ends a few hundred feet higher up, but sends its stones down almost to the edge of the main ice-stream. The space between the stone-shoot and the Baltoro glacier is occupied by a lake-basin, part of which was fairly dry. When the coolies came up we caused the tents to be pitched on this damp sandy flat (Storage Camp ; 14,210 feet) and gladly took refuge in them from the showers that never left us alone for more than half an hour at a time.

This was the place we appointed for storing our extra kiltas and loads of provisions. Unfortunately there was little wood about, so I was only able to discharge twenty coolies on their arrival, keeping other twenty for an extra day to scour the surrounding slopes for fuel. Of the twenty sent down, fifteen were to load up with flour at Askole and return at once. We spent the whole of the next day (August 8th) in camp busied about many matters of arrangement that needed attention. It rained heavily from morning till night.

August 9th.—The continual rain and bad weather of the 8th did not by any means exhaust the waters of the skies. Rain continued to fall during much of the night, and when our usual waking time—if we can be said to have had one—arrived, there were all the conditions prepared outside to make a longer stay in bed seem far the wisest course. Thus it was eight o'clock before the day's march began. We took to the glacier immediately, and found a fairly level way up it, following a stone-covered belt that descended from Younghusband glacier. A large medial moraine comes down this glacier and makes a wide sweep out into the Baltoro. We climbed to the top of this, and I set up the plane-table, beginning once again the survey work which had been suspended since we left Askole. I continued the survey to a much lower point on our way down the glacier.

Many flowers were growing on the medial moraine, and more were found yet further up the main glacier. From our position on the medial moraine we could look far up to the base of Gusherbrum, and beyond it towards the Golden Throne, which was not yet in sight. As far as we could see, the ice was stone-covered. Its average slope was only $1^{\circ} 22'$. After completing the traverse of the foot of Young-husband glacier (there is an easy col at its head) we quitted the ice and took to the north bank, which, as below, abuts against the glacier at a steep angle, leaving no vacant flat space. Every now and then there is a lake caught between the hillside and the ice, but the slopes on both sides are always steep, and travelling across them is not a rapid process. In this neighbourhood I noticed that the glacier has in recent years slightly shrunk, but not enough to leave a moraine-rib for the convenience of climbers.

We passed below the feet of two small glaciers and clambered over the fans from one or more avalanche gullies. Amongst the *débris* at the foot of these were two tolerably good ibex heads, with the skin still clinging to them, and in one case the skeleton close at hand. Shortly after noon we reached a place flat enough to camp on, just at the end of a pool of water (Pool Camp; 14,480 feet). There was grass near at hand for our flock, and a few roots of brushwood for fuel.* Here we awaited the coolies, who did not make their appearance for more than two hours. As soon as they deposited their loads we sent them off to return to the last camp and bring up the things left there and several loads of wood. We had now only twenty-five coolies. Henceforward, therefore, double journeys had to be made, and the marches reduced in length.

In my diary I poured out our griefs as follows:—"This glacier is altogether the most inhospitable we have seen.

* Between Storage Camp and Pool Camp we found, on the right bank, *Corydalis crassifolia* and *Sedum Ewersii*. Near Pool Camp the following plants were collected:—*Delphinium Brunonianum*, *Lychnis apetala*, and *Draba tibetica*.

Not only is its surface wholly stone-covered and horribly mounded, but its sides are steep and always difficult to traverse; they are exceptionally barren, with little grass and almost no fuel. Thus we are put on short commons at a level where we might expect to enjoy tolerable comfort, and we cannot make a base-camp with the ease that we might on any other glacier we have seen. This adds greatly to our difficulties. The badness of the weather is a further annoyance, but to-day there has been visible a tendency to clear up, and, as I write, the sun is at last shining brightly, and appears to be driving the clouds away."

August 10th.—The fine sunset of the previous evening and the bright moonlight that followed proved to be harbingers of good. The weather steadily bettered, and, when 2 a.m. came, we decided to carry out the plan formed on the previous evening, and to start for a climb. We were weary of trough-wandering and pined for peaks. There was frost on the ground, and the air was crisp. At three o'clock we left camp—Bruce, Zurbriggen, and I, with Harkbir, Amar Sing, and Parbir. McCormick remained behind to try and get back a little of the rest, of which toothache and other misfortunes had deprived him for some days. Karbir also stayed in camp to cook provisions for his companions. He was the only bachelor among the Gurkhas, and they have some superstition about cooking being done by an unmarried man.

The brilliant moonlight enabled us to dispense with a lantern. We started straight up the slope of grass and stone *débris* behind camp, and advanced at a fairly rapid pace. It will be remembered that west of our camp and between it and Younghusband glacier there are two small side glaciers below the feet of which we passed on our last march. East of us was another small side glacier. Beyond that there were more small side glaciers which we had not yet seen. These glaciers are divided from one another by long straight ribs of rock which spread out below into *débris* and grass slopes. All these ribs descend from the crest of

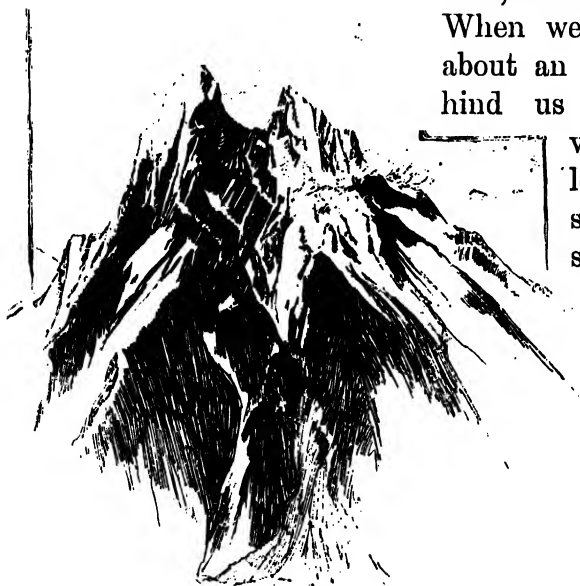
the great ridge that divides the K. 2 glacier from the Baltoro. Our route led straight up the rib at the foot of which Pool Camp was situated, and our intended peak was the highest point on this rib.

The grass and scattered stone slopes, up which we started, soon gave way to a steep slope of large *débris*, a kind of prolonged and exaggerated Rimpfischwänge. The dawn seemed to linger, but the moonlight sufficed to make even such unpleasant ground, as we had to travel over, visible in all its details.

When we had climbed for about an hour the view behind us was greatly de-

veloped. We could look up the various side glaciers to the south, and discover

the order and arrangement of the peaks at their heads, but it was not these that startled our interest and made us halt thus early in the cold morning. A far more important object



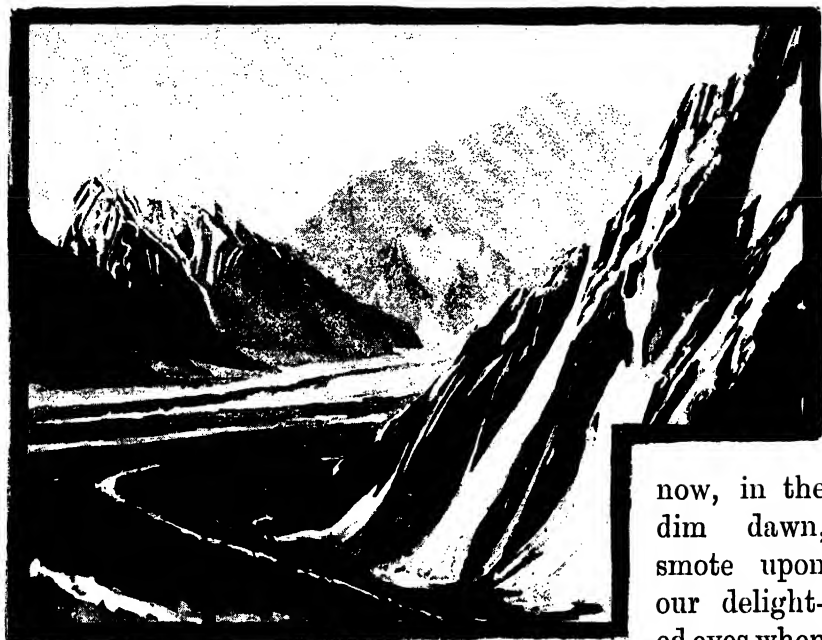
THE MITRE FROM THE FOOT OF CRYSTAL PEAK.

was in sight fifteen miles away to the south-east.

The great Baltoro glacier is formed by the union, at the west foot of Gusherbrum, of three chief affluents. I named them Godwin-Austen glacier, Throne glacier, and Vigne glacier. The Godwin-Austen glacier descends from K. 2. The Vigne glacier comes in from the south, and is fed by the snows of the Chogolisa peaks. The Throne glacier divides, about eight miles above the great crossing, or *Place de la Concorde* (as a similar place at the head

of the Aletsch glacier is called), into two branches, and between them rises a rounded mountain mass. To it I gave the name Golden Throne (23,600 feet), for it is throne-like in form, and there are traces of gold in its volcanic substance.

It was this, the most brilliant of all the mountains we saw, that had been rising into view with our ascent, and



FIRST VIEW OF THE GOLDEN THRONE FROM THE
FOOT OF CRYSTAL PEAK.

now, in the dim dawn, smote upon our delighted eyes when we turned round. With

one consent we cried out, "That is the peak for us; we will go that way and no other."

The chief object of our day's expedition was thus early accomplished, for we had come forth to see the great peaks and make our choice from amongst their virgin array; and now, though we had seen but one, we were captive to its charms, and our choice was made. We halted, as I have said, for half an hour to fix the lineaments of the great peak once for all in our memory, fearing lest the envious clouds, which enveloped Gusherbrum and Masherbrum, should

hasten to wrap away our beauty from our sight. But in this matter, as in many others, the Fates were generous this day; and though at times the sky was heavily beclouded, and the great mountains were for the most part deeply buried in misty folds, the peak of our desires remained almost always visible, from side to side and from base to summit.

We went forward in a happy frame of mind, and the stones no longer seemed so hateful. When the dawn broke we halted to photograph the Golden Throne, and shortly afterwards we reached firm rocks, which led us to a charm-



LOOKING ACROSS THE BALTORO GLACIER FROM THE
FOOT OF CRYSTAL PEAK.

ingly situated plateau (17,480 feet), apparently intended by nature for a plane-table station, and promptly utilised by me as such. Above this plateau the ridge narrowed to a sharp rock

arête, which we followed for the remaining four hours of our ascent. It is an arête with many gaps and decorated with many points, shoulders, and teeth. It consists almost entirely of one kind of rock, whose rather rotten strata, inclined but little from the vertical, cut approximately at right angles to the direction of the ridge. Resulting from this formation, there are frequent walls of rock across the ridge presenting steep faces to be climbed.

Sometimes we scrambled along knife-edges of rock, sometimes we went over the very top of jutting pinnacles, sometimes we were forced on to the steep face, one side or

the other of the ridge, and clambered along little ledges till we could get into a gully and climb back by it to the arête again, thus evading a difficulty presented by the crest of the ridge itself. Below, on the left, at the foot of a precipitous rock-ribbed slope, was a narrow glacier, broken from side to side by deep and impassable schrunds. Below, on the right, was another glacier at the foot of a slope less steep, but still steep enough for a stone, loosened by our feet, to bound down it, taking an avalanche of its fellows along, to the icy plain.

On leaving the station I roped between Zurbriggen and the admirable Harkbir, who carried the instruments ; Bruce and the other two Gurkhas followed unroped for three-quarters of an hour as far as the breakfast place (18,600 feet). Bruce climbed excellently throughout the day. All the Gurkhas went very well indeed. Harkbir showed the best mountaineering ability. Besides climbing as well as the others he picked up the mountain craft more rapidly, and already began to handle rope and axe in a promising manner. Before the end of the season he was as good as a good Swiss porter, and if he could work for three years under a first-rate Swiss guide, he would become a good guide himself. Karbir could also be made into a good guide in the same time, and Amar Sing was only a little less promising than these two. Parbir scrambles well enough, but will always remain an amateur.

I have mentioned our breakfast place, but the breakfast there eaten was not a mighty meal. We were again experimenting on the Kola biscuits. Before starting we each drank a quart of soup made of meat-peptone, and ate a few Garibaldi biscuits. On the mountain we ate nothing but Kola biscuits (one for each man every hour), and a little chocolate. We drank only water or snow, but we had a small pocket-flask of liqueur brandy with us—for use in case of an emergency, which was always invented sooner or later. On this light food we climbed the whole day, without suffering the least discomfort or feeling the slightest

pangs of hunger or exhaustion, and when we returned to camp in the evening we ate a small supper, slept well, and awoke next morning perfectly refreshed. Then it was that hunger came upon us and we made up at every meal for the drain upon our reserve stock of energy which, I suppose, the Kola had enabled us to effect.

We halted for an hour (6.30 to 7.30) at the breakfast place, enjoying and photographing the gorgeous view that was displayed all around. Bruce and his Gurkhas put on their



LOOKING ACROSS THE BALTORO GLACIER FROM THE SLOPES OF CRYSTAL PEAK.

rope. Parbir amused himself by roping Amar Sing in a slip-knot and almost rolled over a precipice in shrieks of laughter. The sun was shining brightly on the eastward face of the arête, but the other side remained in frosty shade, and the delicate spiculæ of ice, with which the rocks were furred over, remained crisp and unmelted till the direct sunlight actually struck upon them and dissolved and dried them away simultaneously.

Though we had already reached a height of over 18,000 feet, we felt little inconvenience from the rarity of the air, as

long as we advanced at a steady pace, and were not obliged to take up cramped positions or to hold the breath. If one keeps one's chest free, so that it may expand to its utmost limits, the lungs supply themselves with air enough; but if the man in front tugs at the rope and thus constricts the chest, or if at the moment of making an unusual effort one holds one's breath, as one naturally will, a slight sensation of giddiness supervenes; but this is immediately dissipated by a few deep breaths.

A quarter before noon we finally stood on the summit of our peak, which we named Crystal peak from some quartz crystals discovered near the top. We were disappointed to find that it was not situated on the crest of the ridge dividing the Godwin - Austen and Baltoro gla-



MUSTAGH TOWER FROM THE ARÊTE OF CRYSTAL PEAK.

ciers, but that a deep gap separated us from that ridge. We could look over it at many points, but a narrow pyramid of rock, about 22,000 feet high, stood exactly between us and K. 2, whose buttresses only could be seen. Immediately on our arrival I photographed the whole panorama round, and set up the mercurial barometer, which read 14.84 inches, its temperature and that of the air being 45° Fahr. Our altitude was 19,400 feet above sea-level. I worked for half an hour at the plane-table, and was then

able, with good conscience, to sit down and enjoy the glorious prospects which saluted the eyes in whatever direction they were turned.

The two small glacier basins on either hand, and the pinnacled wall to the north, behind them, were like the elements of high mountain scenery in all parts of the world. I therefore turned my back on them, the more willingly because they shut out the very mountain we most wanted to see. Southwards the view was similar to that from the Zermatt Gorner Grat, though on a larger scale. The Baltoro took the place of the Gorner glacier, sweeping down from left to right, and fed on the side opposite to us by a series of affluents, each of large dimensions and descending from giant peaks. The Golden Throne occupied the position, and, though far surpassing it in beauty, mimicked the form of Monte Rosa. We could trace the stony route we had followed all the way up the Baltoro glacier, which was visible almost to its foot, and we were able to discover the mistakes we had made. Slender threads of white ice come down as far as opposite Pool Camp, the compressed remnants of tributary glaciers from above, but these are all lumpy, and do not afford a practicable route. Such lumpy lines of melting, attenuated, and laterally compressed mounds form a characteristic feature of the Baltoro glacier and its upper affluents. Of the great mountains, K. 2 and Gusherbrum were both hidden, the Golden Throne was gloriously displayed with a white icefall stretching up behind it to the broad Kondus saddle which we half hoped to cross. Further round to the right was a mass of peaks, brilliantly white and striped by an astonishing number of sharp snow arêtes and ribs. This mass culminates in the Bride (K. 6; 25,119 feet), but clouds were drifting about it, and we could never be certain which was its highest point. Then came a series of lower, but still fine, snow-peaks whose glaciers descended towards us. The white-faced many-bladed mass, I have before mentioned, was amongst these, and, over its right shoulder, Masherbrum reared itself imposingly aloft. The

outlines of the many ridges of the white mass and of Masherbrum swept down to the glacier, one beyond another, in similar curves of admirable grace, like the ribs of an acanthus leaf; and these emphatic lines, thus flowing together, bound the view into a mighty unity, which imposed itself upon the eye and fastened on the memory. Beyond Masherbrum were countless minor peaks away to Mango Gusor and the ridge opposite Askole, but clouds rested upon them and shut out any glimpse to the great distances which this, the only gap in the giant amphitheatre that surrounded us, might have permitted.

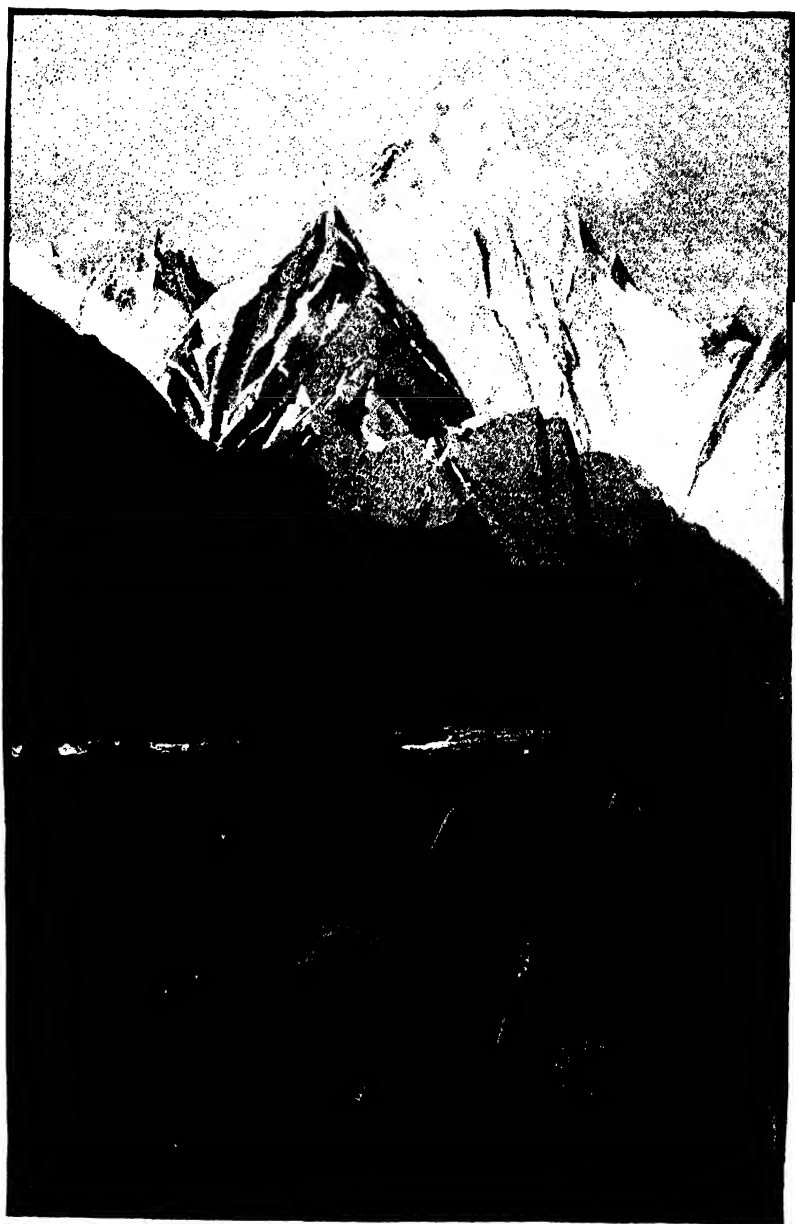
We remained an hour and a quarter on the summit in perfect comfort, eating our biscuits, and, by no disagreeable sensation whatever, feeling, so long as we sat quite still, that we were a foot above sea level. We smoked our pipes without labour. Such absence of conscious discomfort, however, must not be taken to imply that diminished atmospheric pressure was producing no effect upon us. Even at 10,000 feet diminished pressure reduces the powers. The relative slowness of our march up the stony glacier from Baltoro, and the extreme fatigue daily experienced after only five or six hours of toilsome advance, were due quite as much, no doubt, to the thinness of the atmosphere as to the difficulty of the way. Our ascent to Crystal peak was done at a fair pace, when the distance of the peak from camp is considered, but the pace was chiefly made over the lower slopes. The sensations of comfort experienced on the top were probably more due to the cessation of discomforts that immediately preceded than to an absolute condition of well-being. If we could have been suddenly transported from Crystal peak to sea-level, I imagine that there would have been a marked change in our sensations. I was the only one of the party who had work to do on the summit, and it required a far greater effort of will to face and accomplish the work, than mere fatigue, of which I felt little, would account for.

At length, at 1 p.m., we reluctantly turned to descend.

We retraced our steps for a few yards along the deeply corniced snow ridge, crept through a gap in it, and struck straight down a snow-crested rib on the east. It was a steep rib, and the snow was rather soft; besides, it rested upon ice which now and again came too near the surface to be comfortable, but there were always rocks close at hand, to which we could take if need arose; so we advanced without anxiety. We followed the rib for about an hour and twenty minutes, and then got off it into the couloir on our left hand, by which we reached the snowfield at the head of the glacier below, in one hour and three-quarters from the top of the peak. We ran down easy snow-slopes for a quarter of an hour to the edge of the stone-covered portion of the ice (16,900 feet). The remainder of our descent to camp took three-quarters of an hour, and was over moraines and slopes of big stone *débris*.

Camp was reached at 4.15 p.m. We were rewarded by finding that in our absence a mail and various needful things had arrived from Skardo. Nothing lacked to perfect our satisfaction. McCormick saw us coming, and had a brew of lemonade ready for us. Dinner quickly followed. We presently turned in to rest, and Zurbriggen tells me that all night long I was mountaineering in my sleep, crying out to him, "*Ja! Es geht;*" and again, "*Es geht nicht; probieren wir anderswo.*" But what a gorgeous climb it was, and, for the matter of that, a memorable one, for no peak of such altitude, in which there was any considerable mountaineering difficulty, had ever before been climbed, and the climbing on the Crystal peak was at least as hard as the climbing on the Matterhorn, though that is not saying much in these days.

August 11th.—A brilliantly cloudless day, filling all our hearts with content and our spirits with hope. I spent the morning and the first part of the afternoon writing diary and letters. Never were we fuller of vigour and animal strength. At 4 p.m. the tents were struck, and off we started for a short march to another camp. We scrambled



GUSHERBRUM FROM NEAR WHITE FAN CAMP.

straight up the glacier's stony side-slope, down which for the last forty-eight hours rocks had been clattering to our constant annoyance ; this brought us to the edge of the glacier, which was followed for half an hour. We quitted it for the right bank, where there was a deep-lying dry lake-basin at the foot of an avalanche gully, and here we found a third pair of ibex horns. We walked fast and left the coolies far behind ; so, coming to a shady place, we sat down till they caught us up.

We employed ourselves during this halt, as on so many others, by throwing stones for Pristi to fetch. A peculiar dog is Pristi ! Throw a stick for him, and if he does not realise the nature of the object thrown he will run after it, but when he finds it is a stick he gives you such a look of utter contempt and disgust as should make you quail. Cast a stone for him and his delight is unbounded ; if it is a mass of a hundredweight, prised out of the mountain-side and sent flying down the *khad*, he will pursue it, and, when it comes to rest, dance around it in an agony of delight and despair. If he can persuade no human being to heave stones for him he will run after odd ones started by goats, or which chance to slide down the face of the glacier. He broke a tooth by trying to catch in the air a sheep-started stone, and another time he put his nose in the way of some flying fragment and got it handsomely bruised ; but small *contretemps* like these in no wise diminish his enthusiasm for the one pursuit which he regards as worthy of a dog.

At this point we came upon a new set of rocks, which give a fresh character to the remainder of the ridge, separating the Baltoro and Godwin-Austen glaciers. They are granites and hard limestones, in colour light grey, buff, and white. There were seams of them amongst the golden-toned masses lower down, but here they constitute the mass of the mountains. They disintegrate easily, and look, at a first glance, like recent sandstones, in places where they have been submitted to the action of water. These light-tinted and

rounded rocks, in the midst of snow, produce a delicate effect, and one which was grateful to our eyes after the weeks spent amidst the uncompromising grandeur of dark splintered needles.

At five o'clock the coolies came up with us, and we started on our stony way once more. We took to the glacier for another half-hour, and got off it at the west edge of the foot of the next great gully, where there is the large fan of *débris* cast down by a considerable side glacier with which we were

destined to make closer acquaintance. This fan is almost wholly composed of pure white limestone *débris*, and from a distance looks like the remains of snow avalanches. The effect is peculiar where it abuts against the black glacier below. We climbed on to the top of the fan and halted to admire the glorious view of Gusherbrum, shining warm, in the evening

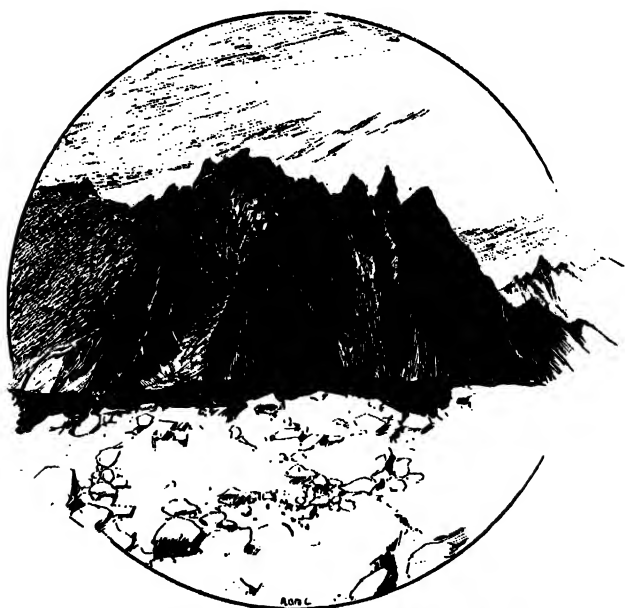


PEAK OPPOSITE WHITE FAN CAMP.

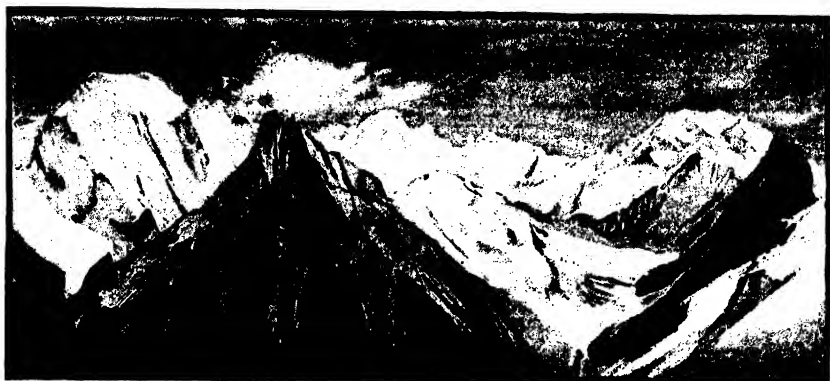
light, above the already shadowed surface of the stone-covered Baltoro. Just beyond the fan is a large dry lake-basin, shut in by the high glacier-cliff on one side, and surrounded on the others by white *débris* slopes, with a glimpse of the foot of the White Fan glacier visible behind.

The sandy flat invited us to camp, and the more temptingly because we presently discovered in it a few pools of clear water, which took the colour of their basins, and so were overlooked at a first glance. But what finally decided us to make this our halting-place was the seductive appearance of the valley of the White Fan glacier. It lay so deep that obviously there must be a low col at its head, and this col ought to command the view we wanted of K. 2. I at once

determined to visit the col on the morrow, and McCormick agreed to come with me. We therefore caused camp to be pitched (Fan Camp; 15,100 feet), and spent the evening making plans. We decided that Bruce and Zurbriggen should go on up the Throne glacier, to fix a place for our final heavy camp, and to explore the route to the Golden Throne, while we ascended to the White Fan col. This settled we retired early to rest.



LOOKING ACROSS FROM WHITE FAN CAMP.



LOOKING SOUTH FROM FAN SADDLE.

CHAPTER XXII.

FAN SADDLE AND THRONE GLACIER.

August 12th.—Both parties left camp at 6.30 a.m. on a clear frosty morning, but our ways immediately divided. McCormick and I, with Harkbir and Amar Sing, struck straight up the stone slopes behind camp. Bruce and Zurbriggen, with the other Gurkhas and three coolies, took at once to the glacier, and made their way diagonally up it. We maintained communications for a few minutes by jödeling to one another, but soon had other things to occupy our attention.

The stone slopes, over which we bore to our right, led us to the foot of the left lateral moraine of the Fan glacier. This moraine is a well-marked rib after the Swiss fashion, and between it and the hillside there is a convenient valley. We went up the valley till it became too stony, and then took to the crest of the moraine, which we followed to its top end, three-quarters of an hour above camp. Here the ice was broken by so complicated a system of schrunds that we looked to see whether we could not rather traverse the foot of the *débris* slopes on our right. They were easy enough,

though steep, but they were scored by falls of stones. The night had, however, been cold, and frost still reigned. The waterfalls that decorate the many gullies on this steep and rocky hillside were for the moment ice-bound, and the stones were held firm. We therefore committed ourselves to the slope, and followed it for an hour to the gentle plateau of snowfield above the schrunds. Even then we still enjoyed ten minutes' walk in the shade, over crisp snow, before the sun finally topped the crest on our right, and made it necessary for us to put on our spectacles and the rope.

We halted for an hour to photograph and enjoy the glorious view that had been developing behind us. It was practically the same as from the col; wider but less deep. On starting again we had only to mount a few easy snow-slopes, find our way over an unexpectedly large bergschrund, and ascend to the pass by a short steep slope of snow resting on ice. The lowest point on the ridge proved to be decorated with a large cornice, so we turned aside from it, and, mounting below the ridge for a hundred feet to the right, gained a convenient rock tooth, and clambered on to it at 10.30 a.m. Its altitude was 18,750 feet.



K. 2 FROM FAN SADDLE.

There was an exciting moment before we topped the ridge. A glance at the old map will show what we expected to see. Below should have been a vast amphitheatre of snow, with the mass of K. 2 beyond it, visible from base to summit. Ever since I decided to come to these remote regions this was the scene that haunted my imagination, and raised my greatest hopes. Now the long expected moment was at hand. Only a frail wall of snow separated us from the wondrous sight. The suspense became almost too

great, and finally, when one more step would raise our eyes above the intervening wall, I almost hesitated to take it. For a moment only; then with a bound I was on the ridge, and floods of disappointment poured over my soul.

There was no great basin of snow; no vast peak rising majestically out of it to awe-compelling heights. Opposite to and level with us was a mean snow-ridge, separated from us by a relatively narrow glacier, and above the ridge there rose into the air an ugly mass of rock, without nobility of form or grandeur of mass, broken up into a number of little precipices, separated from one another by small masses of snow. McCormick, with his bag of blocks and colours, cried out in disgust, "What have I brought these here for?" and down we both sat in comfortless positions on angular rocks, and lit our pipes for solace.

Still, matters were only bad by comparison with our expectations. K. 2 and the great basin were frauds, but there were other things that were not frauds. There was a fine breadth of mountain splendour displaying itself on the right of our view—a huge Breithorn, as it were, filling the space between K. 2 and the hidden Gusherbrum. Along its foot swept the Godwin-Austen glacier, stone-covered over half its width by several big medial moraines, between some of which were lines of laterally compressed ice-waves, such as have already been described. To our left, at the head of the branch glacier below, there was a noble cirque of peaks, whose further flank falls to the glaciers descending from the Mustagh pass. Immediately at our feet a grand wall of snow plunged, with that deceptive appearance of perpendicularity which the steepest snow-walls occasionally assume. It resembled the eastern face of Monte Rosa looked down upon from the Grenz Sattel; steep as that, and quite as long.

But it was not till we turned our backs on K. 2 that we were fully rewarded for our toils. Southwards lies the view that is worth having from this saddle, and indeed from every point on this ridge. It was a mountain prospect,

perfect in all respects, and beheld under every advantage of brilliant oblique light and absolute atmospheric clearness. For foreground there was the fairest snowfield, bending to its hollow with every grace of curve. For frame there were the delicately-coloured walls of two mighty mountains, boldly piercing the sky on either hand to an overpowering height. The Baltoro glacier swept across below, acting as base and broad foundation for an infinite complex of



mountains. Right and left, Jachin and Boaz to this temple of Nature, two

BROAD PEAK FROM FAN SADDLE.

spires of dark rock reared themselves aloft, with a glacier flowing out between them from a low pass. Over this pass there came ridge behind ridge, peak behind peak, higher and higher, tier above tier, with ribs of rock and crests of snow, and deep-lying valleys of ice-bound splendour, till the eye, bewildered by so much magnificence, ceased attempting to unravel the mountain maze, and was content to rest upon the whole as an impression, single and complete.

We stopped for two hours on the saddle, busy with the usual occupations of photographing, plane-tabling, instrument reading, eating, and smoking. In the descent we kept on the glacier to the head of the moraine rib, and had plenty of work to find a way through the schrunds. We looked longingly at the slope on our left, but the stones pouring down it warned us away. In an hour and a quarter from the pass we took off the rope on the moraine, and thence in twenty minutes we rattled down horrible stone-slopes to camp, which was reached shortly after 2 p.m.

The tent had been closed in our absence, and was as hot and stuffy as an oven; but, by admitting what little breeze there was, and loading the roof with blankets, we made the place endurable. Two hours of sound sleep removed all traces of such headache as one generally brings down from a mountain. I awoke to watch the play of fine gossamer clouds drifting up from the south-west, at a height of at least 30,000 feet, on the bosom of a swift air current. They appeared to be descending, and as they did so they lost their crisp outlines, and melted together into a high mist. This thickened into a black and threatening pall of cloud, and blotted out the blue from the sky, but cast it into the mountain shadows. McCormick perched himself somewhere aloft, and painted like fury. At dinner-time he came to the tent, inarticulate and intoxicated with the beauty he had just been beholding—I know not what rare glories of colour, changing from moment to moment, which had been decking the peaks on all sides at once, and driving him nearly frantic.

The evening was devoted to the usual work. When that was done, how excellent was the rest that followed!

August 13th.—McCormick and I, with the Gurkhas and coolies, started at 7.30 a.m. The night had been warm, and the morning was cloudy and unpromising for views of the higher peaks. We took at once to the glacier, and made over it inwards, crossing various moraines. Fifty minutes of quick going brought us opposite the foot of the

last glacier in the ridge dividing the Baltoro and Godwin-Austen glaciers. It descends from a basin, held in the lap of the angle peak, the same peak that was immediately above us when we were on Fan Saddle. We halted to set up the plane-table, for rain threatened, and we feared lest all the view should at once be blotted out. We were surrounded by a piebald set of mountains. All are naked of grass, and support little *débris*, so that the alternate beds of black and light grey rock, gneiss, granite, and limestone, of which they are composed, stand out in striking distinctness, especially on a sunless day, when local colour is not subordinated to light and shade.

During our halt Harkbir examined the surface of the stone-covered glacier, and presently called out that he had found the footsteps of Bruce's party. He showed us the print of Pristi's foot, and thenceforward he followed the faintly-marked tracks of our predecessors, and led us to the place where they lunched. We were the more thankful for this helpfulness on his part as a mysterious note from Bruce, received on the previous day, left us very much in the dark



COULOIR ABOVE FAN SADDLE.

as to his whereabouts and plans. Climbers have often expressed astonishment at the success with which guides, shikaris, and mountain men in general follow, over long distances, a faintly marked track. They usually refer the power of doing this to some special intelligence, whereas it is really due to absence of intelligence. If a man's mind is nearly a blank, he can keep his attention fixed on the dull *minutiae* of the stones in the way. The thoughtful and generally observant traveller, occupied by all objects of interest surrounding him, and on the alert to take notice of whatever may come in sight that is worth notice, cannot fix his attention on such barren details. A good climber can dispense with the services of a guide, but if he does so he locks up his mind. He must regard the details as well as the general line of the way, and his mind cannot remain free for those larger and more important observations, which are the chief preoccupation of an explorer. Having once told Zurbriggen the line he was to take, I washed my mind clear of all matters of detail. A guide is essential to an exploring mountaineer to enable him to do this.

A further spurt of twenty minutes, during which snow fell (or was it hail?), brought us beyond the corner of the ridge on our left, and permitted us to look straight up the Godwin-Austen glacier to the base of the great peak. Here, if anywhere, we thought the mountain should look grand. But clouds veiled all its upper part, so that we could only see the bases of the spreading buttresses that support it. During the remainder of the march these were always in sight, and now and again we had glimpses of upper parts through rifts in the clouds; but the whole mass was never clear, nor did we receive any pleasure from such views as the clouds permitted. Far finer, on the other hand, was Gusherbrum, though his head too was always clouded. His great mass is penetrated by profound gorges, down which glaciers find their steep descent. The roof of clouds above these lonely rifts rendered them unusually

GOLDEN THRONE FROM JUNCTION CAMP.



solemn. In fact, under almost any circumstances of light and weather, Gusherbrum is a finer mountain from this side than his loftier neighbour. The north face of K. 2 appears to be its best front.

We bore steadily away to the right, for we were come to the division of the glaciers. The Godwin-Austen affluent sweeps up at a right angle to the north, whilst the more important branch from behind the Golden Throne comes to the place of junction from a direction somewhat south of west. We could look straight up the ice-stream as far as the foot of our peak, and observed with satisfaction that, though the medial moraines were still numerous and wide, they were on the whole flat. As we advanced, the Vigne glacier began to open out, draining a basin surrounded by grand white walls and lofty peaks.

When, at 1 p.m., we were opposite the middle of the mouth of this glacier, and could still look straight up the Godwin-Austen valley, we came to the place on the moraine where Bruce and Zurbriggen made a long halt and built a rough shelter. We took this to have been their camping-ground. Up to that moment we were expecting to find their Whymper tent in position, and thought that they had merely gone ahead for the day to explore the further route; but now the meaning of their note dawned upon us. They had gone forward a second march, intending to leave the big tent at the foot of the Golden Throne, and thence to begin cutting a way through the seracs which there interrupt the even course of the glacier. We had only half the baggage with us, and were not prepared to abandon the hope of at least seeing K. 2 before the bend of the glacier shut it out from us. So we decided to camp at once, and send the coolies back for the rest of the baggage. We levelled a place amongst the stones and set up the tent, and the Gurkhas built themselves a hut. No sooner was everything snug than the clouds abandoned their intention of clearing off, and settled down upon the glacier. Rain began to fall steadily. We spent the afternoon over our usual

camp operations, and hoped against hope for better weather. The height of Junction or Concordia Camp was 15,870 feet.

Towards dinner-time I sallied forth, hearing from McCormick that there was a breaking in the clouds. K. 2's south-western flank was shining through a rift, and there were fine effects of delicate light upon the snow, both towards our peak and up the Vigne glacier. For a long



K. 2 FROM JUNCTION CAMP.

time we hoped that the sky would clear, but there was never more than a breaking. The misty drama that was played in the theatre of the Godwin-Austen glacier riveted all our attention, and we watched it till the darkness of night settled down upon us. The peak kept showing through the clouds, now revealing one portion of his ample tower and now another. Across his base were always stretched soft scarves or drifts of grey mist, and over his

hoary head hovered changeful clouds that still borrowed a rosy light from the farthest west. A bold rock peak before him puffed coils of dark smoke across his flanks. The light faded as we watched, and everything grew softer and more ethereal. A white drift of mist came creeping up the Baltoro valley, slowly, and, as it were, from stone to stone. All form melted out of the clouds above, and at last the top of the great peak, a splendid black mass, looked down upon us through a vaguely defined oval opening in them. Then the drifting mist reached us, and hail came pricking over the roof of the tent.

August 14th-17th.—We little supposed, when we pitched our camp on the moraine by the great open area where the glaciers meet, that we were destined to spend five nights at this inhospitable spot. The fates fought against us in a variety of ways. It snowed heavily throughout the night of our arrival, and there were between three and four inches of snow on the ground about us when we awoke the following morning. The mountains were buried from our sight in dense clouds.

One of the chief things McCormick came from England to do was to paint a picture of K. 2 from near at hand. There is no picture of Gaurisankar, none of Kinchinjanga save from great distances. Nanga Parbat alone among the giants has, I believe, been painted from the glaciers at its foot. I was determined that, if we had to wait till winter, we should not move till this portion of our programme was accomplished.

The necessities of portorage also delayed us. We could not plunge into *nevé* regions and leave the organisation of our supplies incomplete. Our previous march was as much as laden coolies could accomplish in one day. I sent them back to Fan Camp on the evening of the 13th; it was noon on the 14th before they joined us again with their loads. The position of affairs was then as follows:—There were a tent and three loads with Bruce at the foot of the Golden Throne. The coolies that carried them had

returned to me. There were about forty loads at Junction Camp. At Storage Camp (14,210 feet) there were a few loads of reserve things that we did not expect to need, or at any rate not till our return. There also were our sheep and goats, for the mountain slopes higher up produced neither food for them nor fuel. The coolies and servants ate nearly a load a day. They required daily about three loads of fuel. The coolies who brought it took a day to go down for it, half a day to collect it, and a day and a half to bring it up to Junction Camp, or two days to Footstool Camp.



CRAGS AT THE FOOT OF GUSHERBRUM FROM
JUNCTION CAMP.

Each day a party arrived and one went down. A man came up daily, driving one or two sheep and carrying goats' milk. The sheep in camp fed on the green of the fuel till their time came. These arrangements were not made without trouble. The first set of fuel coolies

that arrived burnt almost all their loads on the way up. They were not enthusiastically received by any one, and least of all by the Gurkhas, whose cooking could not be done with the Defries petroleum cooking-stove which we had to fall back on.

Unfortunately there were only three bottles of petroleum. Rahim Ali found the stove such a comfort in his tent that he burnt all three in twenty-four hours! Fortunately fuel

arrived just when the oil was gone. We had also a Rob Roy cooking apparatus and a little spirit, but that was kept for the big mountain.

. It seemed to be a point of honour with Rahim Ali to feed us best when we were in the worst places. On the 14th it snowed all day, so he kept serving us with hot meals and continual supplies of soup or tea at intervals to fill up the time. Where the fresh milk came from I could not discover, unless he had a goat up his sleeve, and the fresh eggs were even more of a mystery. He gave us hot fresh herrings for breakfast, chops and a sweet omelette for lunch, soup, a joint, and scrambled eggs for dinner. He produced each dish with a grin like a conjurer. He always had a way of coming to me and asking, "When



IN JUNCTION CAMP.

would you like to have dinner?" In the early days of the journey I used to answer, as suited our convenience, "In half an hour," or "In an hour." I soon noticed that such answers depressed him, and were not what he expected. I was intended to answer, "Now." Then he would smile and say, "It's quite ready," as though the dinner were cooked by magic at one's command, through his skilful instrumentality. During our halt at Junction Camp he seemed to be always at the tent door with his "When will you have lunch?" "When will you have soup?" "When will you have tea?"

The first night of our halt was uncomfortable enough,

considered from the point of view of the coolies, who had to sleep out in the open rolled up in their blankets. The second night promised to be even worse. The Baltis, who were not sent off for wood, sat down and boohoo'd aloud, having nothing else to do. Harkbir meanwhile was devising arrangements for their comfort. He made them all get up and build the walls of a set of little huts for themselves. But there were no flat stones to cover them, so he came to the tents and took away our mackintosh floors,



GOLDEN THRONE FROM JUNCTION CAMP.

which he made into roofs. We had to sleep on carpets of broken stones like a new-made road over the ice. I don't know how the others found it, but I slept comfortably enough. The afternoon was so wretched and cold that we went to bed in the middle of it and did not get up again that day.

It snowed or rained almost all the night, but the minimum temperature was only 31.5° Fahr. The sun came out in a sickly fashion about ten o'clock in the morning, and



K. 2 FROM JUNCTION CAMP.

melted the new snow away, but the clouds never lifted, and it kept snowing or raining at intervals till far into the following night. The coolies visited me in the morning and knelt in a ring before the tent door, saying nothing. I sent fifteen of them down for wood, so that they might spend the bad weather in more hospitable regions.

We expected that Bruce and Zurbriggen would pay us a visit, and prepared lunch for them. They duly arrived to eat both it and ours. Their provisions were all exhausted the previous day, and they appeared in a famishing state. Bruce's account of their doings was as follows:—The day we climbed to the Fan Saddle they made a long march to Footstool Camp (16,430 feet), at the foot of the Golden Throne. They lunched at Junction Camp on the way. Next day (13th) they attacked the icefall of the branch of the Throne glacier descending from the Kondus Saddle. They cut their way up through about 1,300 feet of it, making large steps for future use. They also carried up some stores and left them at their highest point. The snow that fell that night and on the 14th obliterated all their work. Seeing that the weather remained bad, and that we should be delayed, they came down to feed and replenish their exhausted stores. We were delighted to see them. Four in a 7-foot tent is rather close packing, but in miserable weather this does not matter. I spent the day reducing observations of all sorts, and especially making out rough approximations to the altitudes of the points we had ascended.

On the morning of the 17th the tents were again buried in fresh snow, and the weather still looked unsettled. The minimum temperature in the night was 16° Fahr., and the morning was cold. Bruce and Zurbriggen started off for Footstool Camp at 10.30 a.m., carrying plenty of self-cooking tins and other provisions. With McCormick's help I laid out a base-line, 1,203 yards in length, and prepared to take theodolite observations. K. 2 showed himself from time to time, but not in a picturesque fashion.

McCormick painted it, whilst I measured the angle of elevation of its summit and that of the Golden Throne. When my observations were reduced it appeared that K. 2 is 11,880 feet above Junction Camp, and the Golden Throne 7,720 feet. The height of Junction Camp, as given by the mean of the barometric observations, is 15,870 feet. The resulting height of K. 2 was therefore 27,750 feet, and of the Golden Throne 23,600 feet. The height of K. 2, derived from the mean of nine, closely agreeing, determinations made by the officers of the Great Trigonometrical Survey of India, is 28,250 feet. Probably, therefore, Junction Camp is 500 feet higher than our barometric observations made it. If so, the Golden Throne will be 24,100 feet high, and Pioneer Peak over 23,000 feet.*

In the afternoon clouds came down and snow began to fall again. Eight coolies returned from Bruce, and I sent nine up to him with loads.

August 18th.—At last the baggage arrangements and the weather permitted us to start upwards once more. The night had again been cold (min. 20° Fahr.), and some snow fell. There being no occasion for an early start, we lay in our sleeping-bags till the sun came out. The coming of the sun, in these clear altitudes, produces a sudden and immediately perceptible effect. The thermometer leaps up some 15°, and all Nature shows signs of awakening. The tent, covered with snow, and previously dark, becomes immediately transparent, and casts a green light upon every object within. The snow lying upon its roof begins to melt the moment the sun strikes it. A slight crepitation is heard as the ice-crystals break up, and little rivulets of water rain down the sunny slope. Now and again a baby avalanche falls, leaving a brighter green stripe in its track. In half an hour the snow is all gone, and then the tent becomes unbearably hot. The flaps must be flung open, and every

* This question is discussed at length in the *Alpine Journal* for February and May, 1894 (vol. xvii. p. 33).



K. 2 FROM THRONE GLACIER.

breath of the cool air from without that can be enticed to wander in is a welcome visitor.

It was a grand morning, beyond a doubt. Clouds were hovering about the peaks, but most of the great mountains were clear. K. 2 looked down upon us. A few ribbon mists curled about its base, though all else of its imposing front was unclouded. The Golden Throne, up the valley, displayed all its white-draped breadth in inviting splendour. With so much to attract, we soon left the shelter of the tents, and by 8.30 a.m. all were ready for a start. There were only ten coolies at hand, so we could take no more than that number of loads with us, but they were amply sufficient for present needs. We retraced our steps in twenty-five minutes to the theodolite station of the previous day, and there set up the plane-table. The sun melted the snow from before our feet as we advanced—not, as in lower regions, turning it into water or slush, but drying it up into the thirsty air. The stones lay upon the gently undulating glacier like a pavement, almost pleasant to tread upon, so that the first half-hour of our walk was a real delight.

Beyond the theodolite station the snow began to lie over the stones, but there was a path through it, as though carefully brushed for us. This was the track made by Bruce and the various parties of coolies. The snow of previous days was melted under the pressure of their passing feet, whilst it remained unmelted on either side. The fresh fall of last night was cleared off by the morning warmth, where it lay thinly on stones, and so the track of the previous day was disclosed. A quarter of an hour above the theodolite station we came to one of the coolies' camps, the position of which was marked by a stone hut, likely to remain standing for a year or so, till the motion of the glacier overthrows it.

We followed the moraine for another forty minutes to a place where the tracks divided. One route continued up the moraine; the other, which had been taken by Zur-

briggen and Pristi, led on to the ice-band to our right. Coolies always stick to moraine as long as possible, partly because they have an indefinite dread of ice, but more because the stones are less cold for their indifferently covered feet. We decided to follow Zurbriggen's way, and go on the ice—a decision we soon regretted. The whole surface was thickly covered with fresh-fallen snow, and looked delightfully smooth; but we had not gone far over it before crack! went some one's footing, and he was ankle-deep in icy water. A step or two more, and in went another, and then another. The holes were shallow, but each sufficed to wet a foot and make the owner of it miserable till the water in his boot and the foot had been brought up and down to a common temperature. The fact was that the glacier hereabouts is scored over with rivulet channels. These had been blocked by the new snow and turned into a series of puddles, each of which was frozen over, and the whole evenly covered up with six inches of snow. A more admirable set of booby-traps could not have been constructed by the most diabolic human skill. To make matters worse the holes trodden by our predecessors were in many cases treated in the same fashion. They had filled with water, been crusted with ice, and dusted over by the snowfall of the previous night. They were inviting to tread in, but every few steps one would go through and plunge a few inches deep into water at the freezing-point.

We were obliged during about half an hour to stick to the evil path we had chosen, for we were separated by a deep stream on our left from the moraine. When we climbed on to the moraine once more we halted to set up the plane-table and get a little dryness and warmth into our feet. The coolies came up with us, and we all went on together. The moraine became very undulating, but by keeping along its south edge we managed to avoid the worst of the ups and downs.

The whole of the day's march led through splendid scenery, but this part of it was finest. The foreground was



THE GOLDEN THRONE FROM THRONE GLACIER.

of a rare and peculiar description, for close on our left hand stretched an avenue of icy mounds or pinnacles, which come out of the Secret glacier as big waves. Here they rose from a flat band of moraine, mounds of white out of a fairly level black base. They are a peculiarity of the Baltoro glacier, and are supplied to it, not only by the Secret glacier, but by several other side branches. As they descend they become more and more slender, and in their most attenuated form they are the first pieces of white ice that a traveller meets with as he mounts the main stone-covered ice-stream from Askole.

These brilliant pinnacles formed the foreground of our view. Straight ahead was the imposing Throne, now broadening before us. Right and left large side glaciers were opening out, with the Hidden peak (26,483 feet) partly disclosed at the head of one, and the Bride (25,119 feet) at the head of the other. The Secret glacier, on our left, interested me greatly. It is of vast dimensions, and must clearly drain a large area of snowfield. I found that it divides into three main branches. One of these sweeps back behind the outliers of Gusherbrum. One bends away eastwards to some hidden pass. The third runs northwards between the other two.

We should have more enjoyed the splendid scenery if we had not been faint with hunger, nor suffered from a difficulty of getting enough air into our lungs. Here, at an altitude of about 16,000 feet, we found greater difficulty in breathing than at any time in the ascent of the Crystal peak. Nor were we alone in thus suffering. Bruce and Zurbriggen warned us that we should feel these disagreeable sensations on the day's march, for they were similarly incommoded on the three occasions they passed this way. On comparing notes it appeared that all had felt alike. The difficulty in breathing was clearly connected with the stagnation of the air in the enclosed valley and with the heat of the sun. It disappeared to a great extent when the sun was covered by tolerably thick cloud,

or if there was a wind. It utterly disappeared the moment we sat down. I was reminded of the experiences of persons who ascended Mont Blanc in the first half of this century. They spoke of the stagnation of the air and the misery caused by it, especially in the hollow way or corridor above the Grand Plateau. I now understood what they meant, but was even further from being able to account for our common sensations than they thought they were.

Clearly, however, the lack of food was the chief annoyance from which we were suffering, and the thing to do was to push on steadily towards camp. We only made one more plane-table halt, and then struck across the snow-covered ice to avoid a long bend made by the moraine. After toiling for nearly an hour we were led by the track into an icy basin shaped like a saucepan. It was once filled with water. We entered it by way of the cleft that the waters cut in their exit. Another narrower cleft, by which the waters entered, was our way out. This opened into a second deep basin, which was long and narrow, and that communicated by another cleft with yet another basin like itself, and beyond these was again a fourth. So large and complicated a system of deep reservoirs I never saw on any other glacier. There are doubtless plenty of the same kind in this neighbourhood. They are caused by the fact that the surface of the ice here is very undulating, but not broken by crevasses, and therefore moulins cannot be formed, so that there is no access to sub-glacial drainage channels for the water melted off the top of the ice. If the glacier were flat instead of undulating there would here be a large area of slush, such as is met with in the upper regions of the Biafo.

At last, at 3 p.m., we were back on our moraine again, and approached Footstool Camp (16,430 feet). The base of the Golden Throne reared itself over our heads, and what had seemed its mere foundation-stone became a noble precipice overhung by an ice-cliff. As we came near, a series of ice

avalanches thundered one after another in rapid succession over the rocky wall. It was at once the mountain's salute and its defiance. We found Bruce, Zurbriggen, the



GLACIER LAKE-BASIN NEAR FOOTSTOOL CAMP.

Gurkhas, and Pristi awaiting us in camp. We had marched three hours and a half and plane-tabled for three hours. We were as hungry as men could be. Food was at once

set before us, and while eating it we were entertained by the account of our companions' doings.*

Two days had passed since they left us to return to this camp, in weather that was altogether horrible. The second day was fine in the morning, and they intended to go and work in the seracs after lunch, but then, as with us, snow came on and confined them to the tents. This morning, however, they started early and went up the seracs for about 1,300 feet. They found them in a much worse condition than when attacking them on the 15th of August. Then they were able to go up unroped for some distance, but now everything was thickly cluttered up with bad, new snow, which lightly covered deep abysses and disguised the snow bridges. The new snow was in places waist deep and had to be waded with infinite exertion and care. Of course all the steps had to be cut afresh. Bruce suffered much from cold in the ascent, but not consciously from lack of air, as long as the sun was hidden. The hard work told on one of the Gurkhas who had been badly fed for two days, through lack of firewood to cook chapattis. They returned to camp shortly after noon. The upper part of the mountain, as far as they saw it, presented no difficulties beyond those inherent in length, altitude, and softness of snow.

Pristi was also half-starved—a condition which produced in him an exceptionally insinuating and affectionate manner. The two meagre sheep we drove up with us were also exhausted. They were put out of their fatigue at once, and soon Pristi's pangs of appetite and affection were allayed together.

August 19th.—This morning Bruce, Zurbriggen, and the four Gurkhas started up the seracs carrying loads of provisions to be deposited as high up the icefall as possible. They took one coolie with them as an experiment, but he soon came back. McCormick and I remained in camp to write up diaries and go on with the map. The morning was cold till the sun climbed over the Throne, but

* *Lychnis apetala* was the only plant collected at Footstool Camp.

the sky was in the main clear, and the weather seemed to be settling fine. The position of Footstool Camp was superb—the great precipice behind it, the two grand mountain walls leading westwards on either hand, and, in the distance, the mighty south ridge from K. 2 and the fine peak that rises over the Mustagh pass, in form and mass doubtless the finest of all the rock mountains in this region. Fleecy clouds hovered over most of the high peaks, but



THE MITRE FROM FOOTSTOOL CAMP.

gaily, and not as though about to descend upon them and blot out the landscape. Midges came out with the sun. They left us alone, but settled on the snow and seemed to suck their food out of it. They were the only living things to be seen.

By lunch-time most of my work was done. Bruce's party returned at 1.30 with a tale of partial success. The coolie proved useless. Before he had crossed two crevasses he was pale as a sheet with fright, and his knees were

knocking together. Even without a load it was all he could do to stand. "*Mais quel race de coolies !*" said Zurbriggen, "*Ils ne peuvent pas se tenir debout vides.*" The man was accordingly sent back. Harkbir shouldered his pack and Bruce took Harkbir's. The snow was hard frozen, and yesterday's tracks were in first-rate condition, so that the highest point of the previous day was reached rapidly and without trouble.

A narrow band of seracs, a couple of stone-throws wide, now seemed to be all that separated them from the plateau above. This was not expected to give much trouble. When they came close up to it, however, it turned out a very serious matter. It was the Shallihuru seracs over again, only with this difference, that these were masked by soft fresh snow, waist deep. For three hours they worked, heavily laden as they all were, to cross this narrow place. Bruce describes Zurbriggen's performance as incredible. He says he never conceived that it was possible for a man to do the things Zurbriggen did. He describes him as having to all appearance, on more than one occasion, jumped across a great chasm and stuck on a steep face of thinly snow-covered ice on the far side. Zurbriggen said the seracs were as bad as any he ever saw. After trying to get through them in several places the attempt was given up for the day. The baggage was deposited below them, and the party came down to camp.

After dinner we turned out just in time to see the glorious sunset. All the peaks were clear, save a few in the west which flew light streamers from their summits towards the south. The finest was the Mustagh Matterhorn. The red light refracted from the hidden sun made all these streamers flame against the sky, crimson banners flying from black towers. The effect lasted a few moments and was gone; it was one of the finest visions of colour that the summer yielded us.

August 20th.—The sky at sunrise was absolutely cloudless, and so remained throughout the day. It was one of the

rarest sort of clear days, the like of which is seldom seen in any mountain region. The night was the coldest we had yet experienced (min. 14° Fahr.), and the air remained at the freezing-point for some time after the direct rays of the sun were burning upon us. A white butterfly (*Pieris callidice*) fluttered about the tents, doubtless driven up to these so inhospitable regions by some unkind wind. We saw another later in the day on the glacier about a mile away from camp.



THE HIDDEN PEAK FROM FOOTSTOOL CAMP.

As soon as the sun appeared, the usual swarm of snow-gnats began to dance in its brightness, but long before noon they all departed. It was only in the earliest morning that we used to see them. In the afternoon a bee came searching about my tent, but I could not catch him, and had no good look at him. A crow also visited us, and he completes the catalogue of the fauna of Footstool Camp.

A little before eleven o'clock we started out to measure a base and take observations for the altitudes of the sur-

rounding peaks. We went south-eastwards over the glacier, passing under the foot of the splendid icefall that was causing us so much delay. Pristi, seeing that a walk was coming off, manifested his usual enthusiasm, and went ahead to show his idea of a route. It was somewhat devious. Whenever he found a suitable snow-slope he rolled over and over down it, delighting in the cold snow, which counteracted the blazing heat of the sun on his black back. In soft places he would crawl along on his belly. He investigated every crevasse and put his nose into every runlet of water, and altogether had the best sort of a time. When we halted and threw snowballs for him, he ran after them and brought them back in his mouth like stones, though he scorns to pay any attention to empty jam tins or the like miscellaneous objects. When he was chasing one snowball we would throw others at him, and he tried to pursue each in turn, till he finally discovered that another game was being played, in which his part was not altogether to his liking.

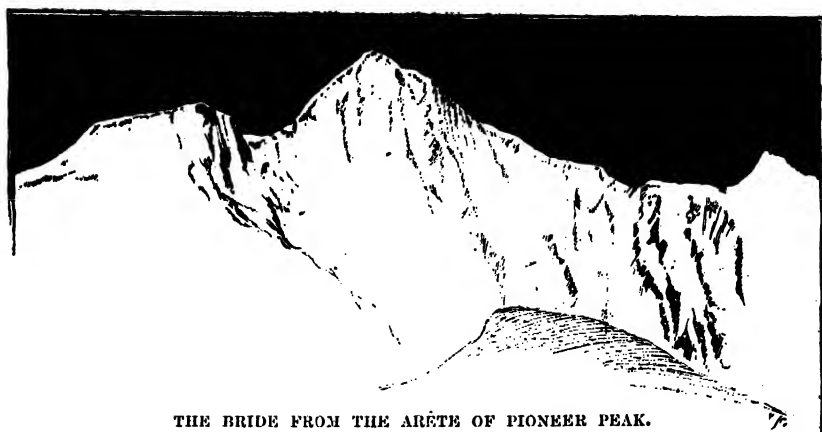
After an hour's walking we reached a suitable station (17,110 feet) for the theodolite, whence the Throne peak was in sight as well as the top of K. 2, and two of the highest summits of Gusherbrum. An hour was spent in the blazing heat taking a round of angles, and then two of the party went off to plant themselves at the other end of the base-line. They were to choose a point whence both the Throne peak and the first station were visible. Unfortunately there was some misunderstanding, and they halted where they could indeed see us, but not the Throne peak. The range was then measured, and I packed up the instruments and descended to join the others at the second station, but only to find, when I got there, that it was useless for the purposes of my survey, and that the morning's work was thrown away. We were far too wearied and scorched by the sun to dream of going back to the first station and sending the others on to a suitable position, so that the only thing to be done was to return to the tents and there endeavour

to get rid of the headaches from which we were all suffering.

It was a quarter to three when we reached the shelter of camp. Lunch was served at once and swiftly smoothed our ruffled tempers. The remainder of the bright afternoon passed in repose.



AT THE TACHEOMETER.



THE BRIDE FROM THE ARÊTE OF PIONEER PEAK.

CHAPTER XXIII.

THE ASCENT OF PIONEER PEAK.

August 21st.—The dawn broke, lurid and threatening. An ominous orange glow rested on the higher peaks, and illumined the wild clouds that curled about them. A horizontal drift of mist at a high altitude cut off the summits of the loftiest mountains, and cast dark shadows about their bases. The wind was again coming from the south, and the night had not been cold (min. 21° Fahr.). With so much to discourage us, we started in low spirits at 6.15 a.m. We followed the well-trodden track to the foot of the seracs, and zigzag up amongst them. The morning was close, and all experienced some difficulty in breathing, so that we made four short halts in the first hour and a half's walking, which brought us to the place where the provisions had been stored, and above which the difficult seracs began. The fresh snow had been reduced, by a series of hot days and cold nights, to admirable condition, so that the work before us was not so hard as two days earlier it would have been. Instead of turning to the left, as Bruce and Zurbriggen did previously, when they failed



4 J 11 C

NEW SNOW AMONGST THE SERACS

to get through, we bore to the right and then back to the left, thus finding a good bridge which carried us over the main chasm in thirty-five minutes (18,050 feet). Above this point the route was easier to find, and we presently emerged on a sloping plateau of fairly even snow, but divided about by a labyrinth of big crevasses.

The glacier here is divided longitudinally into three main sections. The northern section is fed by the slopes of the Throne peak. The central section, upon which we stood, comes from the col at the head of the glacier. The south section comes from the Bride and other mountains on the south, and is a mass of seracs. The south section is divided from the central by an arête of snow, with a buttress of rocks at its foot. This snow ridge at its upper end sticks like a plough into the glacier, and breaks the descending ice into monstrous towers and spires. The central division lies on a lower level than the northern, and the latter presents its side to the former as a steep slope or wall of ice. The edge of this wall is much broken, and so is the lower glacier along the foot of the wall. Our business now was to find a way from the central division up to the smooth level of the northern, and to do this we had to pass through another, though short, series of schrunds and to climb the broken ice-wall.

We chose what seemed a promising point of attack, and were within two yards of turning over on to the upper level, when a final crevasse, insufficiently bridged, stopped further progress. There was nothing for it but to return to the level central division again and make a fresh attempt. We got down, not without considerable difficulty, and then discovered that we must go further up the glacier before the envious wall could be turned. But it was now noon, and all the men were tired with the heat and the heaviness of their packs. Moreover, there were still the loads of provisions to be brought up. So we determined to camp where we were, and leave the next stage of the advance till the morrow. The tents

were accordingly set up, and Zurbriggen and the Gurkhas went down and fetched the provisions—a matter of two hours' work. When they returned we took our meal, and settled in for the night. We called the place Serac-Camp (18,200 feet).

We were in a by no means happy frame of mind. The weather was not good, and looked as if it meant to become worse. Our camping-ground was mere open snowfield, and, do what we would, snow insisted upon creeping into the tent and making everything damp. Our store of provisions was scanty, and there was nothing to drink but snow that refused to melt. At noon the sky had been altogether overcast. After noon the sun shone fitfully. Just as we were settling down to sleep, at sunset, we caught a glimpse, through a chink in the tent door, of a delicate pink light, and faint blue shadows on the highest snowfield of the Throne peak. We hurried out to look towards the west, and beheld a sky of liquid gold, line beyond line of golden clouds in a bed of blue, just resting on the highest peaks—a wondrous and indeed an awful sight, beautiful but threatening. As the darkness closed in, and the night grew cold, we did our best to sleep. The heat and toil of the day left me with a dreadful headache, which did not take its departure till the early hours of the morning.

August 22nd.—The night seemed cold, but was by no means so cold as we expected. The minimum was only 30° Fahr. All the axes were needed to hold up the tents, so the thermometer had to be content with sharing one of them, and may have been shaken during the night. The reading therefore cannot be relied on. Our circulation being already enfeebled, a moderate cold seemed severe. We all slept fairly well, considering our respective circumstances and conditions. At an early hour Zurbriggen and Bruce went off and found the way through to the plateau at the foot of the south-west arête which appeared to lead so easily to our peak. They shouted their success to us, and

then returned to camp for breakfast. Clouds covered all the sky, and threatened every evil. There were still more things to come up from the lower camp: Bruce's sleeping-bag, methyated spirit and cooking stove, the Gurkhas' food for another three days, and so on. In view of the probability of bad weather setting in, and of our being shut up for some days in these evil regions, it was necessary to attend to the question of supplies at once. Bruce therefore decided to go down with two Gurkhas to the lower camp at once and to return early the following day, bringing all needful things with him.

He set off about nine o'clock, and at the same time Zurbriggen and McCormick started upwards with loads to be



THE LOWER PLATEAU FROM SERAC CAMP.

left on the plateau above the seracs. I remained behind in camp to write up diaries and the record of observations. When McCormick and Zurbriggen returned we debated the question of lunch. At this altitude, even were food plenteous, which it was far from being, a man could not wisely eat heavy meals. We were forced to restrict ourselves to one self-cooking tin each per day, hot tea once, chocolate and Garibaldi biscuits *ad lib.*, the whole to be supplemented with meat lozenges if required. In a fit of wild extravagance we determined to take our tea and our tins together for lunch.

The Rob Roy lamp was filled with spirit to boil the water, and instantly began to roar and rage so that we all ran out of the tent as fast as we could. It requires

some skill to work these lamps smoothly at high elevations. At home they burn as kindly as can be, but at 18,000 feet they put on all sorts of airs and graces. Perhaps Kashmir spirit is none of the best—at all events it does not boil water, even at the low boiling-points of high altitudes, anything like so fast as lower down. Then the spirit seems always to be watching its opportunity to go out. Once well alight, however, it fumes and frets and



GOLDEN THRONE AND PIONEER PEAK FROM SERAC CAMP.

sputters, scatters burning drops all around, and oozes out alight from any chink in the apparatus it can find, till the whole tent seems full of flame, and everything is more or less alight. Cooking under these circumstances has its excitements.

After lunch there was nothing more to occupy us, but mere existence at these altitudes was already work enough. While it was cold, or snowing, or night, we were comfortable enough as long as we were doing nothing. One

can lie on one's back and not be able by any conscious discomfort to realise that one is not at sea-level. But let a single gleam of sunlight fall upon the tent and everything is changed. A headache probably appears upon the scene. In any case one pants for breath if one moves; and, if one involuntarily catches one's breath in the act of doing something, one instantly becomes dizzy.

The day was for the most part cloudy, but often the clouds seemed to be transparent to the heat rays, and then, as far as we were concerned, the sky might as well have been clear. The connection between heat, still air, and human discomfort at high altitudes is a close one, and calls for explanation. A climber is forced to take account of it. In attempting the ascent of a high peak he should, if possible, approach it by a north and south valley, so as to win as much shade as possible, and then he should endeavour to climb by an exposed ridge rather than by gullies or snow-slopes, for thus he will the more probably avoid stagnant air. Finally, he should work in bad weather and by night as much as possible, and should avoid a route which will expose his back to the sun for any considerable length of time.

We frittered away the afternoon pleasantly enough. The weather was the main topic of conversation, and about this Zurbriggen had plenty of ideas. He produced a sort of Italian Zadkiel's Almanack, called *Il Doppio Pescatore di Chiaravalle*, and we proceeded to observe the omens. This day was not only the birthday of the new moon, but the sun entered the sign of Virgo, and Zurbriggen informed me that both Leo and Virgo are known to be good signs. On the whole he concluded that a few hours would settle the matter, and that the next week would either be very fine or very bad. But what about the prophecies of the second *Pescatore di Chiaravalle*? Ah! fine days promised, every one. It appears that there are two fishermen of Chiaravalle, the original one, who goes on from father to son, and has published an almanack these hundred years, and a new

upstart, Il Doppio, in whose prognostications Zurbriggen has more confidence. When it was settled that the weather would be fine, snow began to fall with some steadiness, so we turned over to try and sleep, and I remembered the lovely Lombard village, whence the fisherman takes his name, and the beautiful cloister and church, with its Gothic dome, perhaps frescoed by Giotto himself, and in one of the chapels a picture of the Man of Sorrows, which on a fair Italian day of spring I had wandered forth from Milan to see. Between those surroundings and these what a difference! Yet the element of beauty linked them together, and made of both a playground for the spirit of man.

We then fell to discussing boots. "Boots!" said Zurbriggen; "I know something about them. How many pairs do you suppose I mended or nailed at Askole? Seventeen, besides six pairs of chapplis. These of mine are the right sort of boots. They are the best."

"And pray where do you get them?"

"I get them at Zermatt from Fridolin Andenmatten. He makes the best boots. He was a poor handicraftsman, and now he is quite well off. He employs six journeymen, and has more work to do than he knows how to get through. Why, he makes shoes for all the Seiler family, and you know what that means. He bought a vineyard the other day for 10,000 francs, and that shows he is well-to-do; and he came to Zermatt quite poor. But he wastes no hour in the year in any drinking-shop. Day and night he works."

"And how much do you pay for your boots?"

"Well, I pay 20 francs; but then they are good boots. Most guides pay 17 francs. The first pair he made for me cost 17 francs, but afterwards I said to him, 'I will pay you always 20 francs, and you shall use the very best leather for me.' You see he is rich enough to keep a big stock of leather on hand of all sorts, so that if he wants the best leather he always has it; other shoemakers only

buy (and that on credit) enough for two or three pairs at a time, and of course they can't get the best. Besides, look here! this toe-cap is three-fold, and the lower leather round the foot is double, and the sole and heel right along are all one piece of leather in three layers; there is no join under the foot. Of course there are the two extra thicknesses that go to finish the heel, but under those the rest is in one piece with the sole. Oh! they are good boots; one

pair lasts me a whole year.

They are better boots than yours, and if they are dear they are worth the money.

There is another point about them: the edges of the thin part of the sole under the instep in English boots are sewn together; they ought to be pegged.

Snow rots the sewing, and

then the soles separate and water gets in; but pegs swell with the wet, and only hold all the firmer. I have never seen a good pair of English climbing boots. They are all bad in different ways."

While we were talking, the weather cleared up wonderfully; the air was fresh and the sky blue, with a few white clouds sweeping across it. I hurried out and set up the plane-table in order to fix our position before the cold



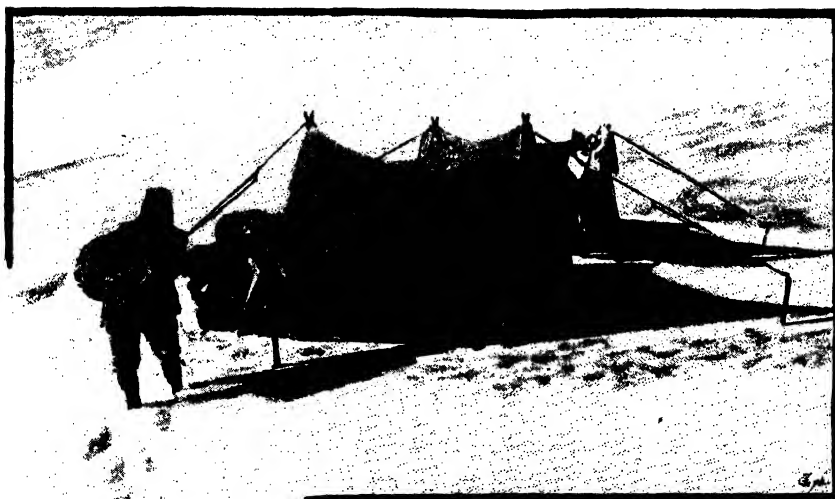
SNOWY PYRAMID ABOVE FOOTSTOOL CAMP.

night came on. I had scarcely finished when the sun sank behind the western ridge, and a sharp frost immediately set in. We did not wait to watch for evening effects, splendid though they no doubt may have been, but with all haste got us into our sleeping-bags and closed fast the doors of the tent. By good fortune we settled down most comfortably, and passed an hour or so in talk till the night was dark. Then I lit the photographic lamp and put a new film into the camera, and when that was done we went to sleep. But for poor McCormick there was little rest in store. Violent toothache laid hold upon him, and made the long hours wakeful and miserable, so that when the morning dawned he was terribly pulled down and fit for little work.

August 23rd.—The morning felt terribly cold, though the minimum had only been 24° Fahr. We delayed our start till 6.30, and then went off with such loads as we could carry, the tent, instruments, and warm wraps receiving the preference. The weather was really magnificent, and only a few light clouds drifted, as usual from the south-west, over the peaks in the immediate neighbourhood of the Mustagh pass, which never seem able to keep clear for many hours together. The trudge across the hard frozen snow was delightful, except for our feet, which felt the cold severely. McCormick alone failed to participate in our enjoyment. We were not conscious of inconvenience from the altitude, and thought we could march for hours with pleasure. Our business was to get the camp on to the plateau at the foot of the arête, whither some of the things had been carried over the previous day. A series of long snow bridges had to be crossed before the sun weakened them. In forty minutes we reached the plateau, and then Zurbriggen and the Gurkhas returned to bring up the rest of the baggage.

McCormick and I set up the tent and put the things into it before discovering that our feet were numbed. We pulled off boots and stockings, and found ourselves possessed of livid and senseless toes. We instantly fell

to rubbing them with snow, and in about half an hour sensation slowly and painfully returned. Thus occupied, the time passed rapidly, and it was hard to believe that an hour and a half had intervened between Zurbruggen's departure and his arrival with the rest of the baggage and the news that Bruce was close at hand with one Gurkha and four laden coolies. Presently Pristi appeared upon the scene and greeted us, and half an hour later he was followed by his master, conveying and partly carrying on his broad back certain notable additions to our



LOWER PLATEAU CAMP.

comforts. We were now able to set up all three tents and to enclose ourselves in room enough to turn round. We called the place Lower Plateau Camp. Its altitude was 19,000 feet. Bruce related how he had a good deal of trouble with the coolies. They shammed all manner of ailments, threw themselves and their loads on to the ground, and tried every trick of passive resistance, but, seeing that they must go, they plucked up heart, and, following the now well-trodden route, reached our plateau without mishap.

When the camp was finally constituted, and the coolies had been started down with the unwilling Pristi in tow,

we turned to our cooking and set the fretful spirit lamp ablaze. Hot chocolate was our exceeding great reward. Then we lay on our backs in the tents and sweltered in the heat. A thermometer hung inside the tent registered at noon 103° Fahr. We debated our future plans, and watched, not without anxiety, the persistent re-gathering of clouds in the west. Now and again the glacier under us cracked and grumbled. In the afternoon a haze, transparent to heat, overspread the sky above us, and presently thickened into cloud. Snow began to fall lightly, and the thermometer in the tent went down to 70°. I said to Zurbriggen that, for lack of anything better to do, I would try and sleep. "Sleep," he said, "for the man that sleeps does not sin; but then the Italians have another proverb, 'The man that sleeps catches no fish.'" But I could not sleep. The sun presently burst out upon the tent, again bringing hateful headaches in its train, so that the afternoon passed burdensomely, save in this respect, that the clearing of the weather promised well for the furtherance of our plans.

When the sun, after playing hide-and-seek behind a series of small clouds, finally dipped his hateful disc beyond the mountain wall, we lit our self-cooking tins, rejoicing to find that they contained Irish stew, or some jorum of meat and fresh vegetables, which is by far the best thing for dining purposes aloft, where vegetables are not. Some cold meat which Bruce brought up also offered itself, lying on a sheet of the *Daily Graphic* for February 18, 1892. "The Pamirs—Lecture by Captain Younghusband," caught my eye—a curious coincidence that the report of a lecture by our predecessor on the Baltoro glacier should find its way to the very region he helped to explore. After concluding the frugal meal we soon went to bed, and all slept well—the best night's rest we had for a week or more. The minimum temperature was 23° Fahr.

August 24th.—Mindful of the cold and the peril from it on the previous morning, we determined not to start so

early again. As usual, Zurbriggen was the first to be stirring, and he made a fine brew of chocolate for us to start the day on. His idea is that when the sun first rises it drives away the cold into all the shady places, which thus become colder than before. Bruce was not well, and determined to spend the day in camp; and Harkbir was also ill with cold, so that, with Karbir ill down at the lower camp, there were three on the sick list. By seven o'clock our chilly preparations were made, and we started. There was only a long snow-slope to be climbed to the foot of the arête, and the snow was as hard as a board. But for our climbing-irons we must have cut steps all the way up. As it was we walked without a halt from bottom to top in fifty-five minutes. Both McCormick's toes and mine again lost all sensation, notwithstanding that we had been in the sunshine for the last half of the way; it took twenty minutes' hard rubbing to bring back life into them. We set up the tent, whilst Zurbriggen and the two effective Gurkhas returned to Bruce's camp to bring up the rest of the baggage. The descent took them twenty-seven minutes, the re-ascent one hour and three-quarters, though the snow remained perfectly hard, the difference in time being solely due to enervation caused by the heat of the sun. When all our work of arranging was completed (and that was pumping enough) we lay on the floor of the tent. We called the place Upper Plateau Camp. Its altitude was 20,000 feet. I gave up smoking till we should return to lower levels, because I found it caused a flutter at the heart, but Zurbriggen contentedly smoked away, hour after hour. When he arrived, speechless and fatigued, from his second upward journey, I inquired after our invalids, and received good news. "Bruce is getting all right; he is eating, as usual, all the time. Harkbir is better, and will come up to us this evening if he can. Anyhow, two Gurkhas will start up at six o'clock to-morrow morning, and Bruce with them if he's well enough."

As we lay in the tent, the sun sometimes blazed upon it, and sometimes snow fell thickly all around. Nothing lasted. The weather changed every few minutes, the drift of clouds from the west being the only constant thing. Our chief trouble was that there was hardly anything to drink. For months we had unluckily, to our no small detriment, been enforced teetotalers. We only had with us for the whole journey a couple of dozen quarter-bottles of the finest liqueur brandy, presented to me, just before starting, by my excellent friend and fellow-collector of old works of art, Mr. Henry Pfungst. Unfortunately, during the packing of my equipment, some thief got at the little bottles, and substituted in many of them the ghastliest fire-water—an atrocity not discovered till the little case was opened at Askole. But this day, as we lay in our tent, we found one of the genuine bottles; and didn't we enjoy it! and didn't it do us good! and shouldn't we have liked more! It was the one interesting feature in the otherwise dull and idle hours, well worth record, with all circumstance, in this minute and veracious history!

The position of our camp was in all respects a fine one. The south-west snow arête, descending, as we thought, from the summit of the Golden Throne, but in reality only from the outlying Pioneer peak, broadens below into a steep snow-slope, at the foot of which is a snow plateau. Beyond and on both sides of this plateau snow-slopes lead down to the glacier, which is seen stretching away to the north-west, till it joins the main Throne glacier stream, and passes round a corner out of sight. The tent was pitched on the flat plateau, and had we cared to turn its door in the direction of the sun, we might have enjoyed noble views. The upper part of the Throne glacier was in our immediate neighbourhood, and never have I seen a snowfield so broken by enormous schrunds, or so encumbered with monstrous seracs, almost up to the cols in its encircling ridge. It would doubtless be possible for a party of trained mountaineers to get over these cols, but they would have hard work with

coolies. On the other side is a desolate country, to which provisions for the party must be carried, sufficient for many days; so that if coolies cannot be taken over, neither can travellers go without them. We had to choose between the peak and a pass, and the pass was finally abandoned, not without regrets.

August 25th.—The night was bitterly cold, and sleep by no means easily wooed. The minimum was 16° Fahr. Poor McCormick was again troubled with a combination of headache and toothache, which only slumber could remove. About half-past two, when all were finally settled down, the clink of axes was heard on the hard snow without, and Bruce, with three Gurkhas, appeared upon the scene. It was far too early for a start, and far too cold for us to let them remain outside; so all seven of us crowded into the tent, and sleep was no longer possible for any.

By five o'clock Zurbriggen was stirring. His was the laborious duty of preparing a warm drink of chocolate, with indifferent spirit to burn, and no space to manœuvre the apparatus in. The Russian lamp began to roar like a falling avalanche; and, while the chocolate was cooking, we struggled out of our bags and into our boots, and wound the *pattis* round our legs, first greasing our feet with marmot fat, for protection against the cold. The needful preparations occupied a long time, for every movement was a toil. After lacing a boot, one had to lie down and take breath before one could lace the next. At five minutes to six all were ready, and, with a farewell to McCormick, we left the tents and started upwards.

There was a long snow-slope before us; this had to be mounted to the ridge along which the rest of our way was to lie. For an hour we plodded steadily upwards in the bitter cold. The risen sun left us still in shadow, and moment by moment our limbs grew colder and our strength seemed to be evaporating. Gradually the severe exercise warmed our bodies; but our feet lost all sensation. We crunched our

toes inside our boots with every step, and stamped our feet upon the ground; but nothing gave the smallest relief. At last it became necessary to halt and pull off our boots, to bring life back to our feet by rubbing. We were all on the point of being frost-bitten, and only saved ourselves by the most vigorous measures. During our halt the sun came upon us; and though our feet remained numbed for the rest



PIONEER PEAK FROM BETWEEN THE
FIRST AND SECOND POINTS.

of the day, our bodies were soon far too hot to be comfortable. These variations between biting cold and grilling heat are one of the great impediments to mountaineering at high altitudes in these parts. Not only are the cold and the

heat alike hard to endure, but the change from the one to the other seems to weaken the forces and to render the whole body feeble.

A quarter of an hour's walk along the ridge brought us to the first peak (20,700 feet). We halted to read the barometer and take some photographs of the glorious scenery by which we were surrounded, especially striking, as it appeared in the early morning, with the blue shadows filling all the hollows of the hills. The opportunity was also taken to eat our ration of Kola biscuits and chocolate, the only provisions we carried with us for the day. All

began to suffer from thirst, but as yet the sun was not powerful enough to melt snow for our drinking.

Beyond the first point there was a small depression, which had to be reached by a rather difficult rock-scramble. On either hand steep slopes or walls of ice descended to the glaciers below, and obliged us to keep to the very crest of the narrow ridge. Here our climbing-irons were of the greatest assistance; for the rocks were fissured over with tiny cracks, too small to catch boot-nails, but affording securest anchorage for the steel-pointed claws. Beyond the little col, which was reached in about ten minutes, the slope on our right hand came rounding forwards, and presented to us a steep face of mingled ice and rocks, which had to be surmounted before we could again travel along the main arête. We had a tough scramble of it for a quarter



PIONEER PEAK FROM THE
SECOND POINT.

of an hour, and then we expected better things. To our horror we found that the ridge leading to the second peak was not of snow, but of hard ice covered with a thin layer of snow. Every step taken had to be cut through the snow into the ice. The snow would have clogged the climbing-irons, and prevented them from taking firm hold of the ice, had it not been cleared away; and the ice beneath was, in any case, too hard for the steel points to penetrate until it had been prepared by a stroke or two of the axe. Small steps sufficed; but if we had been without climbing-irons,

very large ones would have been necessary for safety, the work would have been greatly increased, and our rate of progress diminished. As it was, Zurbriggen found the labour of step-cutting, severe at any time, incomparably more fatiguing than at the ordinary Swiss levels.

From the top of our rock-scramble to the second peak on the ridge (21,350 feet) took an hour and ten minutes, but we were rewarded, when we got there, by finding, under a kindly rock, a little pool of clear water, more precious to us than gold. Amar Sing was overtaken by mountain sickness at this point, and could proceed no further, so we left him behind in a sheltered nook, and, after a tolerably long halt, continued our upward way.

As far as climbing was concerned, the remainder of the ascent was altogether monotonous. The white ridge led up straight before us, and had to be followed. It was of ice thinly covered with snow, and every step had to be hewn with the axe. We sent Parbir ahead for a short time, but though he worked with admirable good-will, he lacked the skill of Zurbriggen, who presently took the lead once more. Our party, now reduced to five, was grouped on two ropes, Bruce with Parbir being on one, Zurbriggen, Harkbir, and I on the other. Harkbir's carefulness and steadiness were admirable, though he alone was without climbing-irons; Zurbriggen was full of commendations for him.

The arête, which we now mounted for two hours and three-quarters, was heavily corniced on our left hand, so that we were forced to keep well on to the right slope, and remained in ignorance of the development of the view in the other direction. Our advance was necessarily slow, and the terrible heat which the burning rays of the sun poured upon our heads did not add to its rapidity. There was plenty of air upon the actual ridge, and now and again a puff would come down upon us and quicken us into a little life; but for the most part we were in the midst of utter aerial stagnation which made life intolerable. Such conditions dull the observing faculties.

I heard the click! click! of Zurbriggen's axe, making the long striding steps, and I mechanically struggled from one to another. I was dimly conscious of a vast depth down below on the right, filled with tortured glacier and gaping crevasses of monstrous size. Sometimes I would picture the frail ice-steps giving way, and the whole party falling down the precipitous slope. I asked myself upon which of the rocks projecting below should we meet with our final smash; and I inspected the schrunds for the one that



THE BRIDE FROM THE SUMMIT OF PIONEER PEAK.

might be our last not unwelcome resting-place. Then there would come a reaction, and for a moment the grandeur of the scenery would make itself felt. There were three passes at the head of the glacier, between the Throne peak and the noble white pyramid, the Bride, opposite to it on the south-west. We were far above one of these, slightly above the second, and level with the third. Mountain masses of extraordinary grandeur were showing over the cols, but unfortunately the summits of the highest peaks were cut off by a level layer of cloud. At length the slope we were climbing became less steep. To avoid a larger mass of cornice than usual we kept away horizontally

to the right, and presently discovered that the cornice was the actual summit of the third peak on the ridge. We held the rope tight with all imaginable precautions whilst Zurbriggen climbed to the top. He found a firm place where all could cut out seats for themselves, and there at 2.45 p.m. we entered upon well-earned repose.

The moment we looked round we saw that the peak we were on was the highest point of our ridge. Beyond it was a deep depression, on the other side of which a long face of snow led up to the south ridge of the Golden Throne. From the Throne, therefore, we were utterly cut off. Ours was a separate mountain, a satellite of its greater neighbour, whose summit still looked down upon us from a height of 1,000 feet, and whose broad extended arms shut out the view to the north-east which I so ardently desired to behold. Framed in the passes I have mentioned there were glorious mountain pictures: that to the south, looking straight down the great Kondus valley and away over the bewildering intricacy of the lower Ladak ranges, being especially fine, and rendered all the more solemn by the still roof of cloud poised above it at a height of about 25,000 feet. When one beholds a small portion of Nature near at hand, the action of avalanches, rivers, and winds seems tremendous, but in a deep extending view over range after range of mountains, and valley beyond valley, Nature's forces are reduced to a mere trembling insignificance, and the effect of the whole is majestic repose. The clouds seemed stationary above the mountain kingdom; not a sound broke the utter stillness of the air. We ceased to pant for breath the moment the need for exertion was withdrawn, and a delicious lassitude and forgetfulness of past labour supervened upon our overwrought frames. All felt weak and ill, like men just lifted from beds of sickness, but Zurbriggen was able to smoke a cigar.

The moments were precious, and each must be used to the best advantage. Owing to the sickness of two of the

Gurkhas, the number of instruments that could be carried up was fewer than I intended. The theodolite had to be left below, and its place taken by a light clinometer and a



ON THE TOP OF PIONEER PEAK.

prismatic compass, which could be carried in the pocket. With these I took a round of angles as carefully as I could. Then I photographed the panorama twice round. The turn

of the plane-table came next, and I was able to sketch in an important addition to the glacier survey. Meantime the barometer, which had been set up, had accommodated its temperature to that of the surrounding air (54° Fahr.). It stood at 13.30 inches, which gave for our altitude 22,600 feet. The summit of the Golden Throne was about 800 yards distant horizontally, and elevated at an angle of 25°. We were therefore approximately 1,100 feet below it. If the G. T. S. value for the height of K. 2 is correct, the Golden Throne must be 24,100 feet high, and the height of Pioneer peak is over 23,000 feet. Finally I took tracings with the sphygmograph of Zurbriggen's pulse and mine; and here the damaging effect of altitude made itself apparent. Our breathing apparatus was working well enough, but our hearts were being sorely tried, and mine was in a parlous state. We had all practically reached the limit of our powers. We might have climbed a thousand feet higher, or even more, if the climbing had been easy, but Zurbriggen said that another step he could not cut. If we could have had tents and warm wraps and spent the night at this point, we might perhaps have been able to restore our forces, and to have climbed 3,000 feet or more on the following day; but I doubt it. We were all weakened, not so much by the work of the previous hours as by the continued strain of the last three weeks. There was no debate about what was to be done next. All recognised that the greatest we were going to accomplish was done, and that henceforward nothing remained for us but downwards and homewards.

We remained on the top till nearly four o'clock, for it was hard to give over repose, and harder still to tear ourselves away from a scene so magnificent and so rare. The southward vistas, which were wholly new to us, of course chiefly arrested our attention on the moment of arrival on the summit, but it was westwards, down the valley we had mounted, and far far away to the north-west that the

vastest area was displayed to our wondering gaze. Gusher-brun, the Broad peak, and K. 2 showed their clouded heads over the north ridge of the Throne, and were by no means striking objects. Further round we looked straight down the Throne glacier to its junction with the Baltoro,

right above which rose in all its constant majesty the finest mountain of this district, second only to the unsurpassable Matterhorn for majesty of form, the Mustagh Tower. It is a peak of great height. Beyond this and the neighbouring Mustagh peaks came the Biafo mountains, and those that surround the Punmah glacier. This was but the foreground.

Away the eye wandered to the

infinite distance, behind the mountains of Hunza, possibly as far as the remote Pamir. This incomparable view was before us during all our descent, with the evening lights waxing in brilliancy upon it, and the veil of air becoming warmer over it. The high clouds that overhung it became golden as the sun went down, and every grade of pearly



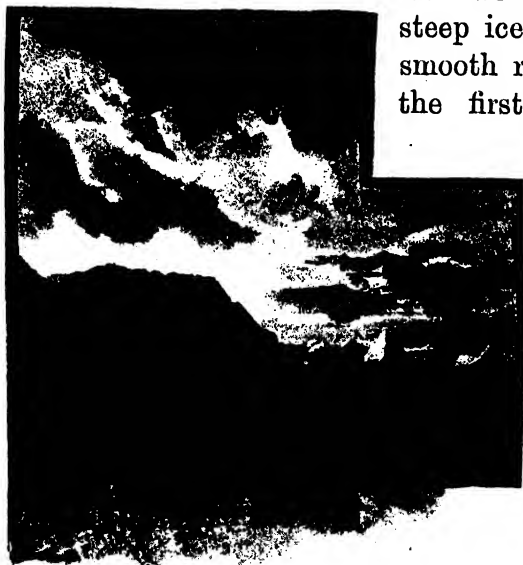
VIEW LOOKING WEST FROM PIONEER PEAK.

mystery, changing from moment to moment, enwrapped the marshalled mountain ranges that form the piled centre of Asia and send their waters to the remotest seas.

A few minutes before four o'clock we started on our downward way, and in little more than half an hour reached the rocks of the second peak, and were able to satisfy our thirst with draughts of fresh water from the generous little pool. Amar Sing was quite well again, and able to make the descent without assistance. As

we were going down the steep ice-wall, just above the smooth rocks near the col by the first peak, we narrowly escaped an accident.

Harkbir was leading, I was second, Zurbriggen was last. Bruce and Amar Sing were some way behind. Harkbir, as I have said, had no climbing-irons, and to make matters worse, the nails of his boots were quite rounded and smooth. He is not



LOOKING FROM THE RIDGE OF PIONEER PEAK.

at all to blame for what happened. The ice-steps, small to start with, were worn by use and half melted off. The time came when, as I expected, one gave way, and Harkbir went flying forwards. I was holding the rope tight and was firm on my claws, and Zurbriggen had the rope tight behind me. The slope was very steep, but we easily held Harkbir. We were not descending straight down the slope, but traversing it diagonally. As soon, therefore, as Harkbir had fallen, he swung round with the rope, like a weight on the end of a pendulum, and came to rest, spread-eagled against the icy

face. Now came the advantage of having a cool-headed and disciplined man to deal with. He did not lose his axe or become flustered, but went quietly to work, and after a time cut a hole for one foot and another for the other; then he got on his legs and returned to the track, and we continued the descent. At the time the whole incident seemed quite unexciting and ordinary, but I have often shivered since to think of it. The ice-slope below us where the slip happened was fully 2,000 feet long.

It took fifty minutes to reach the first peak, and then our work was practically finished, for only a long snow-slope separated us from the tent. McCormick heard our shouts and came forth to greet us. After a final look round, we sat upon the steep snow and slid down it. The evening frost had already seized upon its surface and made it as slippery as could be wished, so that our glis-

sade was rapid and uninterrupted. We shot the bergschrund at the foot without a care, and landed on the level snow about a hundred yards from the tent. The frost having already come on, there was no attraction to loiter about. Bruce and the Gurkhas were a few minutes behind us, and only waited at the tent long enough



LOOKING DOWN THE SIDE GLACIER FROM
THE ARÊTE OF PIONEER PEAK.

to pick up whatever spare luggage they could shoulder before hurrying off to their tents on the lower plateau, which they reached as darkness set in.

Our supper was a poor affair. We had no more spirit to heat anything with, and cold bacon was our most inviting food. We ate sparingly of it. McCormick thoughtfully spent most of the day in saving melted snow for us to drink, and of this we quaffed large goblets, in haste lest the frost should withhold it from us. Then we turned over, content at heart, and wooed sleep. But to me sleep refused to come. My heart raced like a screw out of water, and all my nerves throbbed. Towards morning I slept a little, but longed for the dawn to break, that we might quit the high regions and get down to the comforts of our well-furnished camp on the moraine below.

August 26th.—The night was the coldest we experienced (min. 10° Fahr.), so that we were in no hurry to strike camp before the coming of the sun. Everything had to be packed, and each had his burden to carry. There also remained two loads which the Gurkhas were to come up and fetch. We started down at half-past nine and met Amar Sing and Harkbir a minute or two later. The morning was magnificently clear, the snow hard as a board, and the air deliciously crisp. We trotted happily down the upper slope and glissaded as soon as it became steep enough. So rapid was our progress that we reached Bruce's camp, on the lower plateau, in only twelve minutes. There we found a store of water, won by spreading out a thin layer of snow, to melt in the sunshine on the surface of a mackintosh sheet. We ate a light breakfast, and while thus employed the Gurkhas with our loads appeared on the top of the steep slope. Harkbir sat down to glissade with a kiltā on his back, whilst Amar Sing, carrying the tent, ran beside him. The race ended in an easy victory for Harkbir, who came down a mere chaos of extended limbs enveloped in a cloud of flying snow. The Gurkhas then had to make their breakfast, and afterwards we all pottered about in a reckless

manner, regardless of the fact that the day was becoming furiously hot, and that there was a long stretch of difficult seracs to descend.

When at last we did start down, at ten minutes past eleven, we paid for our loitering. The snow was horribly soft, the sun burnt upon our backs, and all were carrying heavy burdens. Even laden as we were, there were still four loads of baggage, with no backs for them, which had to be left behind. The greatest care had continually to be taken, for our whole course lay over hidden crevasses and rotten snow-bridges. We followed for half an hour a narrow ice-valley between the central and northern divisions of the glacier. Not a breath of air moved in it; the sun shone mercilessly upon us, and its light was reflected from the white walls on either hand. When we came out of this valley to the open glacier, where Serac Camp was pitched, all were exhausted, and something was said about camping again; but what we most needed was to reach lower levels, and with a groan we started down once more.

Now followed two hours of perfect misery. The seracs were in a terrible condition; the bridges were of the frailest nature, and had to be negotiated by heavily laden men with the greatest care. Worst of all, one of the most important of them had fallen in, and we found ourselves face to face with the widest of the schrunds, and no visible means of getting over it. A new way had to be sought out amongst rotten snow and tumbled ice-blocks, loosely wedged in the jaws of icy abysses, and buried in snow that was as soft as water. Ultimately, after more than half an hour's hard work, we succeeded in passing the few yards which had threatened to keep us prisoners in the upper regions. Great was our joy on leaving the last bad serac behind and reaching the spot where the store of provisions was left on the occasion of Bruce's first ascent. Here our difficulties were over, but not our toils. We had still a considerable distance to descend amongst the ruins of the

seracs and the soft accumulations of snow embedded about them. The lower we came the nastier was the going, for the snow became wetter with every step, till it could scarcely be called snow at all, but mere stiffened water resting upon ice. After an hour of this kind of thing we gained the edge of the medial moraine, whose great length we had mounted all the way from the glacier's distant foot. How we had come to loathe the stones on our ascent! How delightful they now seemed after the seracs and the slush! We cast off the rope with joy and hurried forward to where the smoke of a fire showed that our servants were awaiting us, and that food, such as we had lacked for many days, was in preparation. We reached the camping-place at four o'clock, and dinner was served with delightful rapidity. The sun went behind a cloud and permitted us to rest and eat in peace. For the remainder of the day we enjoyed such content as is given to few, and to them seldom in any lifetime.

August 27th.—I was too lazy to put out the minimum thermometer on the previous evening, but left it lying on the top of a kilta within the tent. It registered 24·5° Fahr. in the morning, so that the night must have been a cold one. It was delightful to awake and know that there was a day's rest before us, and that the bulk of our work was successfully finished. Henceforward only a homeward way remained to be trodden. We had accomplished what we set out to do and earned content.

Karbir, now quite well again, and Gofara, with the four best Balti coolies, started at peep of day and went up, through the hard frozen seracs, following our footsteps, to fetch down the baggage we left behind. They did their work well and rapidly, and were back in camp with all the things before the sun made much impression on the snow. Now that there was a better supply of air to breathe we discovered how miserable we had been aloft. Discomfort came on us so gradually in the ascent that the mere cessation of our worst miseries was comfort.

All the morning I sat writing at the door of the tent.

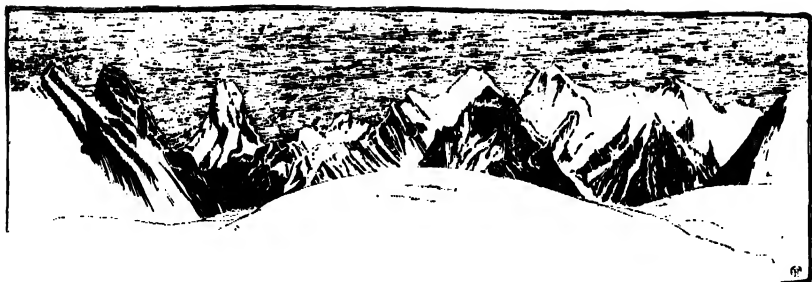
Clouds hung heavily around, and it seemed evident that the fine weather with which we had been blessed was about to break. Little cared we whether it broke or not. In the earlier hours of the day a veil of mist overspread the sky, but let the softened sunshine through. Right opposite me a glacier curtain, broken into hanging ice-precipices, covered the end of the great buttress of the Bride peak. Never have I seen anything more softly shaded than this white mass in the misty sunlight. But I was too jaded with grandeur to look out for effects this day. To be in one's tent, to have water to wash in and clothes to change, food to eat and a rug to lie upon, were satisfactions enough, and I enjoyed them to the full. Rahim Ali exhausted his ingenuities to feed us well, and we praised all his efforts, and did utmost justice to them. From time to time I smoked a long hubble-bubble pipe, of the native pattern, which Roudebush sent up for me from Skardo, and which arrived with the English mail during our absence aloft, and was actually delivered at Footstool Camp. For the previous three days I had found no pleasure in smoking, owing to its action on the heart, and not at all from any lack of breath to smoke with. Now the tobacco appetite returned, and with it came the means of giving it satisfaction.

The ascent of Pioneer peak was accomplished. If it had not been necessary to take into account Zurbriggen's very natural desire to climb a big peak, I should have forced a passage over the Kondus saddle at its south foot. This, however, would not have taken us across the great watershed, but only into the head of the Kondus valley, which, running due south, joins the valley of the Saltoro river, whose waters flow into the Shyok at Kapalu. The Hidden peak (K. ; 26,483 feet) stands upon the watershed, but there is no pass over the main ridge out of the upper basin of the Baltoro glacier, unless there should prove to be one between the Broad peak and K. 2; and that I doubt. At the east side of the watershed is the valley of the Oprang

river, into which only Younghusband has penetrated. The Oprang river rises in a great glacier descending northwards from the Saltoro pass. I was informed by the natives that there is a pass leading up the southernmost of the main easterly branches of the Kondus valley, and another out of the Khokun valley, both giving access to the Oprang glacier. The Oprang river receives tributaries from the glaciers of the Hidden peak and Gusherbrum as well as from the Broad peak and K. 2. It flows at first in a north-westerly direction and then westward till it receives the Sarpolaggo river from the Mustagh pass glaciers. Then it turns north-west again till the Af-di-gar stream from the Shimshal pass joins it, after which it makes a great turn and finally flows into the Yarkand river. The Oprang river is, in all, about 130 miles long. The bottom of the Oprang valley is described as from half a mile to a mile wide. It is flat and stony with occasional patches of jungle and grass. The mountain-sides are bare and precipitous. The face of the Mustagh range towards the Oprang valley would form a magnificent subject for a mountaineer's explorations.



AFTER THE CLIMB.



THE MUSTAGH TOWER FROM FOOTSTOOL CAMP.

CHAPTER XXIV.

FOOTSTOOL CAMP TO ASKOLE.

August 28th.—The indifferent capacity for sleep, which troubled me at the higher camps, was not yet amended. Our tent was pitched, for shelter, close to a considerable ice-mound, covered with large moraine blocks. I satisfied myself that none of these would fall in the direction of the tent, and in particular that a big block at the top was firm. Right and left stones kept falling, but towards the tent they could not fall. Nevertheless, when once I was in bed I could think of nothing but these stones. Had I been correct in my estimate? Crash! went a lump down the side; I was across the tent as though shot by a catapult. I settled down again and began to doze. Crash! went another lump, and I again awoke at the far end of the tent as before. This continued all night, to so horribly nervous a condition had I descended. In the morning the mountains shone brightly in a deep covering of fresh snow. The veiled Bride looked specially grand. As we gazed at her, an enormous avalanche, enveloped in a cloud of snow-dust, such as we had not seen since leaving Bagrot, came pouring down her white skirt.

About a quarter-past nine all our things were packed, and,

to the delight of every one, we started on our downward way. The ice, whose snow covering so annoyed us on the ascent, was now bare, and we walked down its crisp surface for an hour, before the undulations compelled us to take to the flatter moraine. These undulations start where the glacier narrows and are the result of lateral compression. Snow began to fall, driven before a strong southern gale, the strongest wind we had yet experienced. An hour's

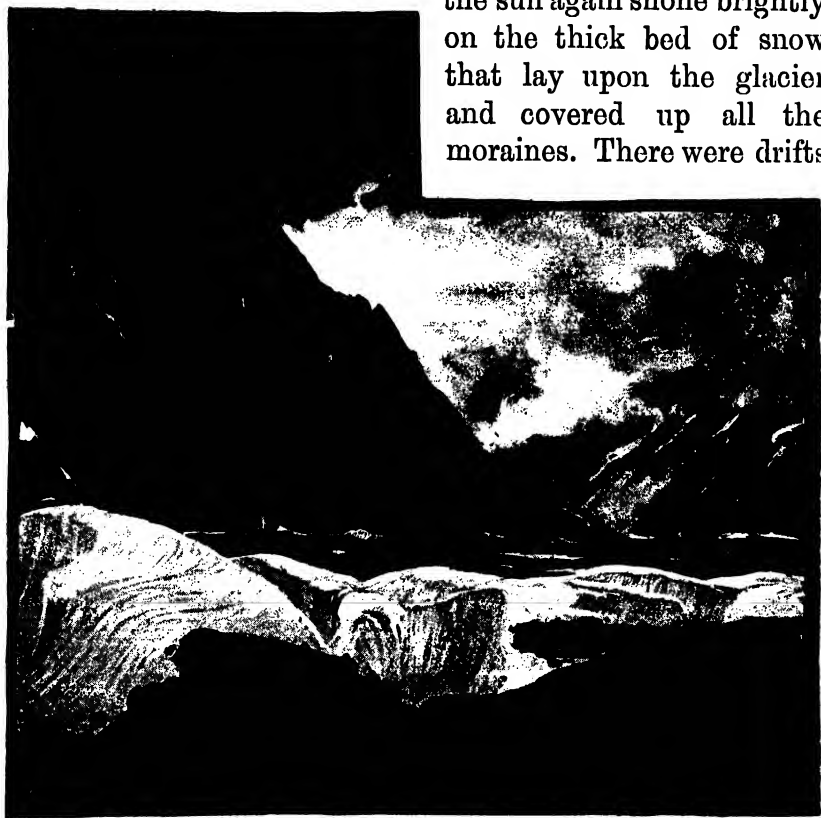


STARTING DOWN FROM FOOTSTOOL CAMP.

walk along the moraine brought us to the big stone that marked my old theodolite station, and under it we took shelter from the inclemencies of the weather. We had to wait there for nearly two hours before the coolies became visible in the distance, then we walked on to the site of Junction Camp and chose new positions for the tents in a sheltered hollow. The coolies' delay seemed endless, but at last the tents were set up and cooking was toward. As the day drew to its close, the weather grew steadily worse,

and snow fell with yet angrier persistence. It was horrible to think of the coolies exposed to such a night, but they built shelters, and huddled together into a tightly packed group. In the morning they were none the worse and seemed not to have suffered any particular discomfort. The minimum temperature was 18.5° Fahr.

August 29th.—To make up for the horrors of the night the sun again shone brightly on the thick bed of snow that lay upon the glacier and covered up all the moraines. There were drifts



MITRE PEAK FROM JUNCTION CAMP.

more than a foot deep about the tents, but the advantage of snow is that the thicker it lies on the tents and piles itself up about them the warmer they become. We waited in camp till after lunch to let the sun have time to thin the snow. By two o'clock the moraines reappeared and we started downwards again. For an hour

we retraced our old route before turning towards the left bank of the glacier, where we hoped to be able to get off the ice and traverse slopes of snow-avalanche *débris*. This was, however, impossible, but the glacier on the left side is flatter, and the stone covering far less troublesome than on the other, and such we found to be the case all the way down.

We passed under the base of the imposing Mitre peak, at the angle of the Place de la Concorde, and ultimately encamped on the glacier near the foot of one of its buttresses, on whose ledges was a little grass. The goats



THE VIGNE GLACIER FROM JUNCTION CAMP.

that had been driven up to Footstool Camp were able to feed on this, and had their first good meal for several days, so we named the camp "Goats' Delight" (15,090 feet). Our march only lasted two hours and a half, but the coolies in their eagerness to get down for once came quickly along and kept up with us. All the afternoon I felt more oppression at the heart and a greater difficulty in breathing than at any other time during the journey. We sent a few coolies across the glacier to Fan Camp to bring in the things that had been fetched up there from Storage Camp. They joined us again the following day.

August 30th.—During the night snow again fell (min. 23·5° Fahr.), but not heavily at the level we had now reached. As the sun showed signs of coming out, we awaited his arrival and did not start till eleven o'clock. After marching a short distance over the stones we exchanged them for an avalanche bed by the left bank. Pristi exhibited transports of delight, rushing around in circles, leaping the crevasses, and rolling himself in the snow. The clouds dividing showed Gusherbrum, all white from peak to base, and surpassingly grand. The day was a most picturesque one in every sense, and all the great mountains we were leaving looked their best. The pleasant bit of snow-walking did not last long; we were soon on the stones again,* but we were able several times to escape from them on to the clear ice of a side tributary which juts far into the main glacier and preserves its purity to a remarkable distance for these parts.

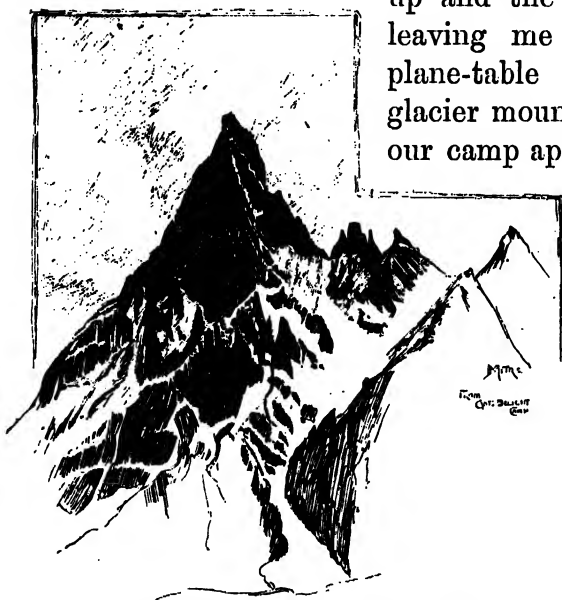
The foolish coolies greatly prefer stones to ice. They seem to have no sort of idea of looking where they are going, once they have quitted their beloved moraines. One of them, fortunately burdened only with flour, walked straight into an open crevasse, and fell some ten feet down it before the sides held him. Then arose a great crying and cackling of the other coolies, who cast down their loads and rushed to the rescue. The unfortunate was soon hauled out, pack and all, and went his way. His comrades one by one came up and shook hands with him and touched their foreheads. I suppose they thought he had been rescued from the jaws of death. A few minutes later, in descending the sloping face of one of the ice-waves, down which Zurbriggen cut huge steps, another coolie calmly stepped on to the slope, and down he went to the flat bottom below. The Gurkhas laughed at the dazed porter, and presently the rest of the coolies, seeing the man unhurt, joined in, for which I was thankful. Two or three incidents of this kind might have established a scare amongst the

* *Barbula rigida* was found growing amongst the stones.

timid Baltis. A little before four o'clock it became evident that the men had worked enough, so we camped on the moraine-covered ice (Hollow Camp; 14,480 feet).

Late in the evening I looked out and saw the moon, now at her first quarter, struggling to shine through the wild clouds. A little cold light still lingered in the west, and against it stood out the jutting peaks of Bardumal like a row of smoking volcanoes.

August 31st.—At a quarter-past nine camp was broken up and the coolies started off, leaving me at work with the plane-table on the top of a glacier mound. The position of our camp appears to have about



THE MITRE FROM GOATS' DELIGHT CAMP.

coincided with the highest point reached by Colonel Godwin-Austen in 1861. We wandered down the stony glacier, and our way was for long devoid of incident. For the first time I felt my strength returned and the atmo-

sphere sufficiently supporting. The coolies' enthusiasm of descent was likewise diminished; they no longer kept up with us, but dropped far behind. We passed along under the broad white face of the great mountain that looked so fine from the other side of the glacier. On a stone island in a glacier pool we saw a little sparrow-like bird and felt that we were reaching the regions of life. Presently a sort of blue-bottle fly buzzed around us, and his hum seemed exquisite music. Smaller flies came to inspect us, and even their attentions were not resented.

With many halts for the coolies and sharp bursts of progress between, we at last came opposite the foot of the most westerly buttress of the broad white mountain. It was grass-covered, and we hoped to camp upon it, but we found that for a mile or more the glacier was cut off from the mountain foot, first by a band of intricate crevasses, and beyond them by a series of large lakes, into the chief of which protrudes a remarkable shattered ridge. A flock of some thirty or more dab-chicks were swimming on one of these lakes, and seemed to regard our presence with indifference—as well they might, for there was no gun with us. The last of the lakes is at the angle where the Stachikyung me glacier, which comes down from the supposed Masherbrum pass, joins the Baltoro.



GOATS' DELIGHT CAMP.

We had to keep far out on the white ice of the tributary in order to round this angle. Then we struck across the moraine-covered surface, and at last stepped on to a grassy bank once more. The sensation was delightful. Amongst the grass were multitudes of plants, some still in flower.* Butterflies were fluttering about. There were plenty of stunted shrubs for fuel, and there was admirable shelter between the glacier and

* At Corner Camp we found, in flower, *Doronicum Falconeri* and *Gentiana tenella*.

the hillside for coolies. The only trouble was that we could find no flat place for the tents. The grassy slope covered an ancient moraine, deposited when the Baltoro glacier was 100 feet deeper than at present. Ultimately we climbed on to the crest of it and had that flattened and the tents pitched there, after a four hours' march. We called the place Corner Camp (14,500 feet).



The position commanded a glorious view, notwithstanding that all the higher peaks were clouded. We could discover the broad base of Masherbrum and could see that both K. 2 and its neighbour, the Broad peak, ought to have been visible above the Crystal ridge. We spent the afternoon busily, dividing the baggage that we needed to take over the Masherbrum pass from that which might go down with Bruce to Skardo, making up accounts for the past month, and generally taking stock. Now and again gusts of wind played pranks with the tents, but they soon died away. In the night, however, a serious gale arose. It tried the tents severely, and for an hour or more made sleep impossible. Our forward rope came loose from the stone that should have held it, and McCormick and I had to support the poles from inside till Harkbir could make things fast again. The gale did not last long, and accomplished no damage.



"NO, IT DOESN'T!"

September 1st.—While we were breakfasting in Bruce's tent I caused all the coolies to dig out a solid platform, big enough for both tents, from the north-facing hillside, in order that our day of repose and the night to follow might be spent in some comfort. The work was quickly and well done, and we regretted not having put it in hand on the previous day. I completed my arrears of writing, and, having made up a heavy mail for Bruce to take down and post at Abbottabad (where the post can be trusted), I dispatched eleven coolies with loads to be carried direct to Skardo, and there left in charge of the tehsildar. The coolies that remained behind presently began to quarrel loudly, and almost to fight. The Gurkhas were delighted and sat on the bank above them shouting *Shahbash!* but the whole thing only ended in noise. Baltis have not the pluck to go further than that.

Zurbriggen, in the afternoon, climbed southwards a couple of thousand feet to the crest of the lowest ridge. There he built a cairn, visible from the glacier. Before he returned, a coolie came back with a note from Bruce to say that he had fallen upon the glacier and hurt his leg. A stone slipped under his too hasty foot. He said he should be delayed for a day or two, and that he was encamped at the west angle of junction of the Stachikyungme and Baltoro glaciers. He said he was all right and wanted nothing. The hill behind his camping-place is the one whose north slope was climbed by Colonel Godwin-Austen. It is the end of a long ridge from Masherbrum. Its sharp peak is bored through with a hole like the Nadelhorn.

September 2nd.—The morning was again cloudy and unpromising, so that we soon determined not to start. We had been most unfortunate in our weather since leaving Footstool Camp. In the two days and a half we spent at Corner Camp the mountains were not once clear. Masherbrum was especially retiring, and the most we saw of him was up to the col in his north-west ridge. Once or twice just the top of K. 2 showed over Crystal ridge. The Broad

peak was oftener visible. From the tents we looked straight up the narrow winding valley leading towards the Mustagh pass. Unfortunately the head of the Mustagh, or Piale valley was never clear. The description of the Mustagh Tower as standing above the pass is correct. Its extremely precipitous appearance from the upper reaches of the Baltoro glacier is deceptive. It is a thin but wide peak, and its south-west arête appears quite accessible. It is the peak we ought to have climbed, for its position is superb.

During the morning Zurbriggen made an expedition up the Stachikyungme glacier to inspect the approaches to the Masherbrum pass. He found two cols, one facing north and south, the other east and west. The former he pronounced now and at all times absolutely impracticable. The other, he said, *we* might get over, but it was certain that the coolies could not. It was evident that the east and west col would not lead over the watershed, but merely back into the side valley whose foot we had passed. Under the circumstances of the lateness of the season and the difficulty of the way, there was nothing for it but to change our plans once more and go down as we came up—a disappointment to all. When this decision had been come to, it was communicated to the coolies, who were all radiant with delight. Snow passes are not to their liking. I spent the afternoon in utter idleness, resting for the long forced march arranged for the morrow.

September 3rd.—We awoke to as unpleasant a morning as these mountains can well provide. Snow fell during the night, and the air was raw. We bundled our baggage quickly together, and started off at 6.15, not at all sorry to be on our way once again for some definite place. We ran down to the moraine edge, crossed the wearisome stones, and reached the clear ice of the Stachikyungme glacier, which we proceeded to cross towards the angle of Bruce's encampment. We unfortunately took too direct a line, and got involved in great icy waves and some crevasses, which impeded our advance. On approaching the farther bank

we came in view of the depression at the head of the glacier, and saw how hopelessly impossible it was, regarded as a col.

Our shouts brought responsive cries, and, whilst I set up the plane-table for almost the last time, the others went to see Bruce. He was nearer than we supposed, and, when I



ROCK-PEAKS ON THE NORTH SIDE OF THE BALTORO GLACIER.

had done my work as well as the clouds permitted, I visited and spent an hour with him, while the coolies made their way downwards. It appears that he jumped on to a big stone that was balanced between two others and gave way under him. He fell "all of a heap," and for a moment or two lost consciousness. On coming to, he found his ankle

twisted, leg bruised, and the like minor injuries. He hopped to the place where we found him, with a rough wall built about him for shelter among the big rocks. We left him food, men, and a tent, and went our ways. He had already sent Amar Sing down to Askole for supplies. He said he intended to lie by for two or three days and then come on.

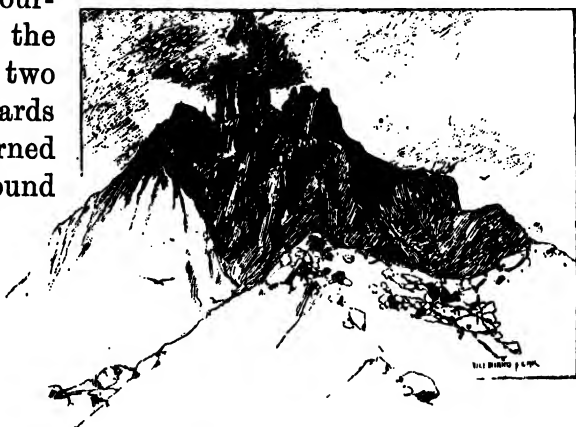
When we started off again the coolies were out of sight far ahead. There was no dawdling or malingering about them to-day. "*Heute*," said Zurbriggen, "*die Coolies gehen wie's Donnerwetter*;" and so in fact they did. We had hard work to keep up with them. We all walked our best, hoping to get off the hated glacier by night. There was little looking about, and seldom did we pause on our way. Our feet required all our attention. Once we sat down for a pipe, and then a gaudy bee paid us a visit. He sat upon a particular stone. McCormick threw pebbles at him and frightened him off, but he always returned to exactly the same spot—for what reason we could not discover. He sat us out.

We kept towards the left side of the glacier and found the going much better than anything we had struck on the way up, but the coolies were always for swerving to the right, and had to be continually brought back by shouts into the true way.

Down we went, hammer and plunge. Now and again there was a bit of clear ice from the snout of a side glacier, but such relief was short. Stones were the regular thing—stones becoming thicker over the ice, and consequently looser every step. We slipped and tumbled on them, but even our tumbles were downwards. "*Hinab*," said Zurbriggen, "*helfen alle Heiligen; hinauf nur Einer und Er heisst Muhsam*." At length hunger seized upon us and we halted for lunch and a good rest. The coolies were far away to the right, and had to be fetched by much shouting, but eventually they joined us, bringing food and fuel to heat it with. After lunch we slept an hour away amongst the stones; then off once more, down the narrowing

glacier with the precipitous granite peaks on the right, and curving round ahead to where we knew the glacier's end to be. The sun began to be hot upon us, and the air felt thick and heavy. A big lake in the ice barred our way. We went around it to the left, and so came to the bank of the glacier, which afforded for a time comparatively excellent going. The foot of the wonderfully shrunk Liligua glacier had to be crossed and its angle lake rounded before we could again take to the left bank and continue our rapid progress.

At four o'clock we were opposite the Uli Biaho glacier, and promised ourselves to be off the ice in less than two hours. A few yards further on we turned a corner and found to our disgust that the gully between the glacier and the hillside became the bed of a torrent. On to the stone-covered



ULI BIAHO PEAKS FROM THE BALTORO GLACIER.

ice once more then! In and out among the lakes, up and down over the mounds; but down, thank goodness! more than up. We struck the track of the coolies, and, to our misfortune, followed it. Away it went to the right, where the mounds were bigger and the stones looser. We pounded after it, and in course of time got on to the foot of the last tributary glacier from the north. Crevasses and all manner of impediments came in the way, and our progress grew slower and slower. It was past six o'clock, and the darkness was approaching. Should we after all have to spend the night on the ice? How we regretted that hour's sleep, and still more a certain ten minutes

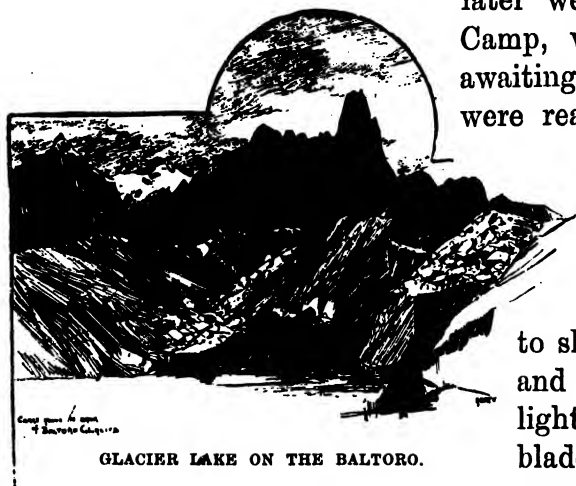
recently devoted to a pipe! We rounded a bend in the glacier, and there far below were the camp fires burning. We hurried on towards them, tumbling rather than going. At last we got into a kind of gorge in the ice, between two glacier folds. We knew it for the way off. The stones were looser than ever, for they fall from both sides into this trough, but little cared we. It would not last long now. Down, down, amongst the sliding rocks. Then the final slope came, and men and stones went over it together in a confused slide. Exactly as the night came on, at seven o'clock, we trod upon ground once more, and ten minutes

later we were in Baltoro Camp, where dinner was awaiting us, and the tents were ready pitched under the very rock they had nestled against that day month previously.

The moon began to shine over the hills and to cast a glitter of light upon the long blades of grass. It was passing beautiful, but

we were too weary to do more than glance at it before turning in for a long night's repose.

September 4th.—We slept our sleep out, and were late in starting. It was nearly ten o'clock before we got off. On the previous day it seemed as though to be off the hated glacier would be delight enough, but now we remembered the loathsome valley that still lay between us and Askole. Once started along it we determined to have done with it quickly. The first part of the way was not so bad. We noticed that the position of the snout of the glacier had not altered much during the last month. If anything, the ice had slightly advanced. The river had greatly decreased



GLACIER LAKE ON THE BALTORO.

in volume. Its channels were fewer and the water was shallower. We could walk in what had been the stream's bed, thus avoiding long *détours*.

We had not gone far before we came to a little side-stream, in which were a number of fish. Harkbir jumped into the water and caught one with his hands. This was the occasion of a halt; but we were not in a mood for lingering, and made up for the delay by extra speed. Sometimes we had to take to the sloping hillside, but oftenest we could follow the level, amongst the rounded stones and soft sand, scarcely dried from the recently retreated waters. It was a toilsome walk, sinking ankle deep in sand, stumbling over stones, jumping waters, scrambling up banks, or sliding down them; but the sun hid his hated countenance behind a thick wall of clouds, and we were spared the enervating heat that made our upward journey so wearisome.

Shortly after one o'clock we voted that lunch-time had come, and accordingly halted beside a stream of clear water, flowing down a trough in the midst of a fan of *débris*. There was brushwood growing beside it, and all the needful conveniences. An hour and a half we rested, and those slept to whom sleep was kind. But the worst part of the way was yet before us, and the time was short. The valley mouth, opposite Bardumal, had long been in sight, but it would not come nearer. We walked and walked, and still it seemed to keep its distance. When at last we forgot to think about it, it suddenly shifted itself to the rear. Some one said, "There is Bardumal." We looked up and saw, close above us, the place where we uncomfortably camped. We passed it without halt or blessing. Half an hour further we crossed a well-remembered waterfall and entered the region of the great fans.

The worst we had to expect was now upon us. Those evil fans! All fans are bad enough, with their long, slow slopes, that look so flat; but these are the very climax of all abominations. They are cut up by endless rayed ditches,

made by the changeful stream. The sides of the ditches are nearly vertical, and there is no way over them but up and down, up and down. It seemed to our tired imaginations as though we must have crossed a hundred of these ditches, varying in depth from six to thirty feet. At last they too were left behind, and fairly level ground took their place. We were approaching the angle of junction of the Punmah and Baltoro streams. At a quarter to six we turned the corner and began to go northwards.

The wearier we became the faster we walked. We began to hope we might make the rope-bridge after all. To camp where we were was impossible, for there was no water. We hurried forward, and were well into the Punmah valley. The rocks of the hills were close on our right hand, the river across its stony flat far away to the left. We were going along the raised ground above it. All of a sudden McCormick cast himself on to the ground in a wretched corner, where was neither wood nor water, and said, "I'm going to stop here. I won't go any further. Here I'm going to spend the night." We wished him luck and went forward. A little further on, finding a suitable camping-ground, we pitched the tents. Zurbriggen went back and fetched McCormick, and all were soon settled in for the night (Dreary Camp; 10,630 feet).

September 5th.—By an implied rather than uttered agreement, it was understood that Askole should be reached to-day. The coolies' protest was easily overruled by an offer of bakshish, which was gladly accepted. They were sent off at an early hour to get themselves and the animals over the rope-bridge before our arrival. They killed and ate a couple of the goats, to lighten their labours, so that the returning flock was, I believe, finally reduced to two beasts. Pristi was also sent on with the first coolies. The advance party was seen mounting the opposite hill when we struck the tents and started at 8.30. [In half an hour we

reached the rope-bridge. The water under it had shrunk to a quarter of its volume, and half the bridge spanned dry ground. I found it much less disagreeable to cross in consequence, as the thing that makes rope-bridges unpleasant to me is the rush of water below.

There was no longer any occasion for taking the upper road, as we had seen the view from it. Moreover, the ascent from the Punmah side, up soft, gravelly, and sandy slopes, is a thing to be avoided. The coolies seemed to think so too, and chose the lower track. It keeps as near the water as it can, but is thrice forced upwards by *parris*. The middle *parri*, at the angle of the rivers, is the only one that involves anything like climbing. There the strata are almost vertical, and the ascent is made by a crack between two adjacent beds. Stones have been wedged into this crack in the steeper places to give footing, but there remain one or two striding traverses higher up, which must be difficult for laden coolies. The rock-scramble only lasts twenty-five minutes, and then one descends to the edge of the united rivers. On our way down we knocked over a couple of butterflies, but a fine black fellow with tails to his striped wings, and one of a brilliant chrome-yellow colour (probably *Colias erate* or *C. sareptensis*), defied all efforts to catch them.

We walked for a few minutes along the dry bed of the river before mounting the third *parri*. Where the ascent commences, there is a ferruginous spring, and, close to it, a dripping flow of lime-laden water, that petrifies the grass and sticks that happen in its way. Just beyond the *parri* a small round stone came flying down through the air like a bullet and passed between my legs. It was the quickest stone I ever saw, and would have inflicted a serious wound.

A few minutes after noon we reached the big stone at Korofon and halted for lunch. When it was over we burnt our ships by sending off the coolies with orders not to halt till they reached Askole Camp; food being thus advanced, there

was nothing for it but to follow till the village was gained. At two o'clock we started on, and in a few minutes reached the stony borders of the Biafo glacier's foot. There were no streams to wade, so rapid progress was made. The end of the glacier had altered wonderfully in our absence.



LOOKING DOWN THE ASKOLE VALLEY FROM THE FOOT OF THE BIAFO GLACIER.

The level of the ice was visibly lower, and its edge had retreated, as I thought, as much as a quarter of a mile. We could not tell when we got on to the glacier, coming at it from the side. There was nothing to show the difference between the stony flat, from under which the ice was gone, and that which was still supported by

ice. Both were alike earth-covered and flower-grown in places.

We had to bear up to the right to get over the cave whence the river issues. This is not at the foot of the glacier, but round to one side, close under the rock which I named the Nose. The cave itself had changed since our former visit. We quitted the glacier between the cave and the Nose at 3.20, and then the vale of Askole was before us. A mild afternoon sun shone upon the landscape, and did not burn us. For once its rays were tender, and its light not blinding. The ripening fields of a village on the south side of the river greeted us, and the grass slopes above it, just beginning to yellow under the touch of coming autumn. The sunlight brightened them, or the shadows lay purple upon them. It was a feast of rich colour that we were in a mood to enjoy, had there been time to bestow upon it; but all our thoughts were to get forward. We hurried over the stony flat and through the gap in the wall. We soon reached a stream of clear water, hurrying down a deep trough, one of whose sides gave a welcome shadow. Water and shade together! the temptation was too strong. We halted a quarter of an hour to smoke, and take a last look back towards the regions we were leaving, before the bending valley shut off the view of them from our eyes for ever. Hated Baltoro, beauteous Biafo, farewell! The memory of you both will dwell with us long, but you we shall never more behold.

A few minutes further on came the big stone which was used as a plane-table station on the way up. The Green Parri followed ten minutes later, and then the hot desert, with the huge fallen blocks scattered over it, turning their shadowed sides towards us, and all bathed in glowing atmosphere, such as in the clear regions above we had not seen for many a day. It was here that the great rock fell a few days later. Beside the stones grew numbers of thistles (*Echinops cornigerus*) with big round balls of blossom armed with angry spikes. Before the desert was wholly crossed

Askole came in sight, looking farther off than it really was. We passed under the waterfall. A moment's halt was permissible, for the end was now near. There was only the angle of a rocky buttress to be rounded, and the tumble-down watch-tower would be reached.

Here the fields commenced, now filled with corn just ready for the cutting. How gladly we saluted them! We entered the path between the stone walls and felt as though we were coming home. The group of houses was ahead, with the many willow trees above it, looking so fertile



NEAR ASKOLE, LOOKING UP THE VALLEY.

by contrast with the bare regions from which we had come. There was something almost European-looking about it, we said; and as we were discussing what this element might be, we were already amongst the houses, and the villagers were greeting us. One held a plateful of eggs—ye bountiful gods! another was slaughtering chickens—oh, beauteous sight! “For us, for us!” we cried, as we entered the walled *bagh* and found our tents ready and all comfortable things prepared.

How beautiful it was to lie after dinner under the rustling trees in the warm night, and to watch the glint of moonlight

on their polished leaves, while the white clouds drifted over the hills and dappled the fields with their dark shadows! But not for long. Fatigue hung heavy upon us, and of all fair things sleep seemed by far the fairest to our weary frames.

September 6th.—Our day's halt at Askole was so much mere bagatelle and frolic. The village was *en fête*, and so were we. The musical resources of the place—two drums and two suranais—were put forth to their utmost. There was



MANGO GUSH FROM ASKOLE.

dancing and singing; even the Kashmiri sepoy danced. General *tamasha* was the order of the day. Everybody in the place got pay or bakshish for having done or pretended to do something. Sheep were killed and cooked and eaten, and the entire population had a merry time, and forgot all their troubles.

Some of us, of course, had to work, for there were journals to be written up, and all the baggage to be prepared; but we were in the mood in which work is done easily. With

night came peace. An incredible softness pervaded the valley. The distances receded behind one another in tenderest tones. The silent moon rose, incomparably majestic, behind a jet black mountain mass ; and the willows, with their lace-like foliage, fretted the silver sky.



THE PIALE GLACIER FROM CORNER CAMP.



IN THE SHIGAR VALLEY.

CHAPTER XXV.

ASKOLE TO SKARDO.

September 7th.—Yet another day's repose would have been welcome to all, but the impelling force that makes men wander would not permit it, so off we started, leaving the *bagh* shortly before 8 a.m. We had a new lot of coolies, who were rather troublesome at starting, for they tried to lighten their burdens by surreptitiously casting aside this and the other small object. They were out-manœuvred, and then things went all right. The morning was neither fair nor foul; cloud-shadows dappled the landscape, and sometimes the sky was overcast; but, on the whole, the day was good both for marching and for picturesque effect.

We strolled leisurely through terraced fields of ripening corn, and down a steep *nala* to the rope-bridge, which is only some twenty minutes below the village. It is a very long bridge, and of necessity high above the water at the ends, but it is kept strong and in good repair. A gusty wind swayed it about. I crossed it at once behind Zurbriggen, and was right glad to be over. We sat down at the far side and watched the coolies crossing two by two. Many of

them found the steep southern end hard to climb. A few minutes before ten o'clock all were safely over.

We followed a field path up the left bank of the river for a short distance, till we struck a small nala, the course of a clear-flowing stream. Here a band of drums and suranais met us, and accompanied us on our way, now and again making music of sorts to beguile the tedium of the march. I hope the coolies enjoyed the diversion. Soon after crossing the nala we came to the village of Mangjong, whose lam-

badhar came forth to salute us, and added himself to our company. He is a fine, Jewish-looking man, Ismail by name. He had a royal air about him, and made every stone he sat upon look like a throne.

As we were entering Mangjong there was a crash, which seemed near at hand, but, on looking up, we found that it was caused by the falling of a huge mass of rock down the mountain on the op-



ASKOLE ROPE-BRIDGE FROM THE SOUTH BANK.

posite side of the valley. The thing raised a cloud of dust that enveloped all the hillside and rose high into the air. It finally came to rest near the footpath we traversed on the 5th, amongst the other big fallen blocks that deck the desert near the waterfall. I photographed it falling.

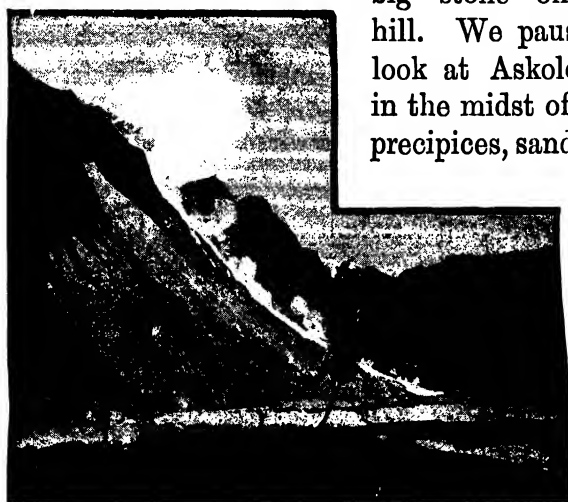
Mangjong looked a fairly thriving village, for these parts. I noticed that portions of the walls of many of the cabins were made of thick wattle fencing, such as our ancient British forefathers used for their round huts. A minute or

two after leaving the village we began definitely to ascend, always steadily traversing to the west, in order to reach the entrance to the high valley in which we were to camp. There was a well-marked track, which one could not miss, and beside it, where there was anything to eat, great black yaks were grazing, hideously ugly brutes that frightened all the pluck out of Pristi—which, however, is not saying much.

I was slack all the morning, and soon became faint with hunger, so that we went slowly. In three-quarters of an hour we reached a corner, where the path goes close to a

big stone on a brow of the hill. We paused to take a last look at Askole—a green patch in the midst of a valley of rocks, precipices, sand, and stones. “It

is well enough to have come and seen it,” said Zurbriggen, “but here one would not choose to live.” Up the valley the broad end of the Biafo glacier was a prominent ob-



A FALLING ROCK FROM MANGJONG.

ject, and, behind it, various minor peaks; but the view was not specially remarkable, and, if we sat for some time looking at it, it was more out of laziness than anything else. On the way up we passed quantities of butterflies, the commonest being of the same kind as those caught at the angle of the Baltoro and Punmah valleys. There were also many speckled black and white ones, only a single specimen of which could we secure, and that after infinite trouble. The chrome-yellow butterfly (*Colias eogene* and *C. sareptensis*) was also not uncommon. A single great red fellow of gorgeous beauty flew past me like a bird. As

we sat by the big stone a hawk came slowly swooping by, and many swallows were darting about; otherwise there were few birds, and of new flowers we found none.

At last we summoned up courage to start onwards once more. One of the coolies was ill, so Harkbir shouldered his pack. We advanced for over an hour, going very slowly; we rounded a corner and entered the upland valley. The scenery changed completely. The valley was almost flat and delightfully green. Cattle tracks scored it in all directions. Streams of clear water came down from unseen sources. There was plenty of grass and scrub everywhere. Crags led up to the sky-line, and a group of snowy peaks of moderate altitude closed in the end of the hollow. It was like Switzerland, and ultimately we agreed that the place reminded us of the Täsch alp.

At the corner was a ruined stone cattle-shelter. A fairly level path leads thence in about half an hour to the collection of huts called Thla Brok, a veritable Swiss alp to all appearance. Just beyond the houses, amongst some big stones, we found the coolies halted and tiffin in an advanced stage of preparation. During lunch the band discoursed such music as it could, and the coolies took it in turn to dance their slow, monotonous measures. The musicians asked leave to descend, which was gladly granted to them, and, the lambadhar having likewise been dismissed, and the coolies sent forward, a pleasant hour might have been spent in perfect repose but for a gusty wind that found us out and incessantly eddied the dust into our faces.

When we had smoked enough we started on again, following the same valley path as before. The scenery became wilder and more monotonous, and the Biafo mountains were gradually narrowed out from view by the closing of the valley's portals. Ahead, the glacier we were to mount, and the col at the end of a short side branch came in sight, and did not inspire us either with admiration or respect. An hour's walk brought us to the last flat maidan,



VILLAGERS DANCING AT THLA BROK.

where the coolies were already halted and the pitching of camp taken in hand. The wind was angrier than ever, and we were glad to enter the shelter of the tents. The name of the camping-ground, they said, was Darso Brok (13,810 feet).

September 8th.—There was no reason why we should have been specially lazy this morning, but in fact we were. Perhaps the uninviting nature of the weather had something to do with it, and the bleak cheerlessness of our surroundings. The grey clouds lay lower than we had ever seen them, and now and again a little snow fell. We sent off most of the coolies early, and ourselves started shortly after half-past seven. We followed a fair track up the left bank of the valley, and in half an hour were level with the glacier's dirty snout. Twenty-five minutes later we climbed on to the stone-covered surface, and presently reached the end of a tongue of clear ice, coming down from the branch glacier leading to our col. The whole thing was intensely Tyrolese, mountains, glacier, and all. The glacier was broken by few crevasses, and those were easily turned. We advanced slowly up it, but without halts, and in due time came to a slope of brown snow that gave access to the upper level of the side valley. The snow all over these mountains, after a continuance of warm weather, becomes brown, or at least dirty, on the surface. This is the result of the great amount of dust produced by stone avalanches and carried by the continual south-west winds that sweep over the peaks.

As we rounded over into the side valley our col became visible at the head of it. Three rock peaks stand out of the saddle, and a fourth mass of rock, overhanging on all four sides, marks the eastern end of the depression. The pass (17,320 feet) lies just under this overhanging rock. We could see torn mists hurried by the wind through gaps in the ridge, and little comfort appeared to await us on the top. The summits of the surrounding peaks were hidden in cloud, and it was only northwards, where the

lower peaks of the Biafo valley were mostly clear, that there was any view worth mentioning. We toiled up a few easy snow-slopes and a final pile of broken rocks, and so reached the pass in three hours' walking from camp.

Looking over the other side we beheld little except a roof of cloud, cutting off all the higher regions and permitting us only to discover the position of the Shigar and Indus valleys. A blue glimpse towards the Indus was the only picturesque thing visible. We halted under shelter of the rocks for three-quarters of an hour, more out of habit than anything

else, for the temperature was only a few degrees above freezing, and the wind hurried round every corner and left us no peace.*

At 11.30 there was a moment's lull in the gale, and we seized the opportunity to scramble through the pass and commence the descent. There was practically no snow on the south side, except a little in the great couloir. The coolies were already far below. A fairly well-marked



THE SKORO PASS FROM THE NORTH.

track indicated the best route. It led for a few yards horizontally to the left, then down a gully of rotten rock, and the rib on the right of it to its foot. Here one has to traverse some distance to reach the back of the next rib on the right, just where it is decorated by a shattered tooth of rock, a landmark visible, as we afterwards discovered, from far below. This rib is grass-grown, and its crest affords easy going. There are numerous bivouac platforms dug out upon

* Near the top of the Skoro *La Sazifraga Hirculus* was found to be very common.

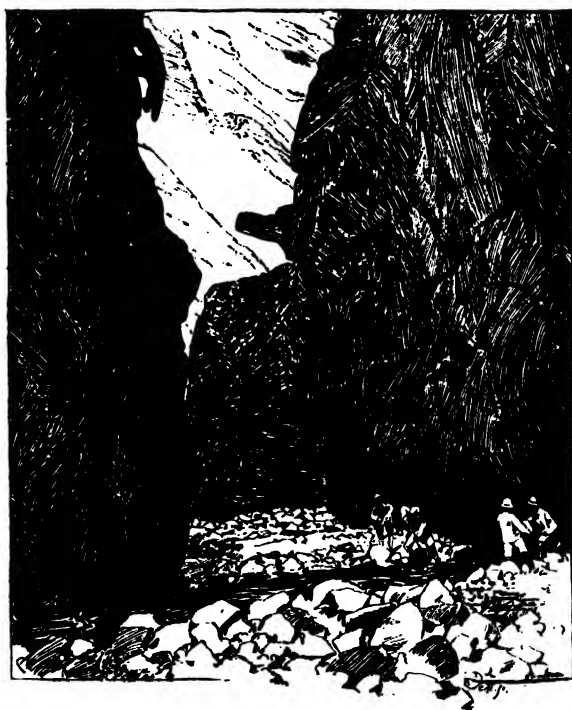
it at different levels. The grass was all brown or golden, and the plants amongst it were withering away. Large patches of *Sedum*, turned crimson or yellow, made a fine play of colour upon it. We hurried down, as fast as possible, to reach the warmer regions below, and eventually were off the foot of the rib in five minutes over an hour from the pass—fairly quick time for a descent of 4,000 feet. A ten minutes' stroll through an open cirque amongst the mountains, with the end of a glacier or two showing out of the clouds above, and several waterfalls tumbling over the cliffs, brought us to a walled enclosure and camping-ground which the Baltis called Shoata. We halted there for lunch.

The character of the scenery had wholly changed. On all sides there were grass slopes and waters. We seemed to have left the barren regions. Rain began to fall, and we were soundly wetted. It was not a heavy kind of rain, but that sort of intermittent varying fall that comes dribbling down, and is specially characteristic of the British Isles. I could almost have believed myself in a Durham dale. The visible part of the scenery was quite in keeping with the illusion.

Below our luncheon place the valley became a gorge. We crossed to the right bank of the stream and followed a good path, which traversed the hillside at a high altitude, before plunging down to the water's edge. It took us into the deepest part of the gorge, between fine precipitous cliffs, just where the stream makes two or three sharp turns. • We had to cross the torrent at this point, and did so with difficulty. We recrossed to the right bank near some stone huts, and, twenty minutes later, crossed back to the left bank again. Two more crossings followed in quick succession. We thus reached a walled enclosure and a flat bit of ground adorned with some trees—a pleasant camping-place enough, named Doksam. Here a considerable side valley comes in from the east, and the main valley changes its character, opens out, and bends away to the west. We

were preparing to camp when Rahim Ali came up and said that the village of Skoro was at no great distance, and that he hoped we should camp there, as he was in need of supplies.

I was delighted to find an excuse for going further and getting out of the inhospitable regions of which we were tired. I longed for trees and fields and the luxuriance of cultivated lands. The coolies were not unwilling to



GORGE IN THE SKORO VALLEY.

finish their work, so off we started once more. Over the stream again, hopping from stone to stone, and then back to the left bank. The valley was no longer a gorge. Its great sloping sides, utterly barren, afforded easy passage, and away at the far end was an inviting glimpse of blueness that seemed to promise

better things if we hastened forward. We did not linger. Traversing slopes, or stumbling over the valley's stony bed, we urged one another on. Corner after corner was turned, but never a village came in sight—nothing but dreary desert slopes leading up to craggy crests. At last we beheld the promise of the end. A final corner revealed to us a slope of cultivation and umbrageous trees overshadowing the desired village. Nor were these attrac-

tive objects far distant. One more struggle through the now widened stream and we were amongst the cornfields. A shady path led, between irrigating canals of babbling water and under apricot trees that had yielded their fruit, to the pretty enclosure beside the village of Skoro (7,930 feet), where our tents were to be set up. The coolies arrived a few moments after us, and, before dark, our camp was pitched upon the grassy sward and the great mountains of Baltistan were finally left behind. We were to sleep in the lowlands once again, and the prospect was good.

September 9th.—This was a day of pure delight to all. We were so well tired the previous evening that we planned a late breakfast and a leisurely start; but a good night's sleep and the fresh morning air brought wakefulness, and we were ready for our meal an hour earlier than it had been ordered. The camp looked charming when we came out of the tents. The eastern hills hid the sun from us, but its light shone abroad on the rocky flank of the range along the far side of the Shigar valley. The little village close at hand, the healthy trees, the fields burdened with approaching harvest, enriched our pleasant surroundings. By eight o'clock the coolies were at hand, and a few minutes later all were briskly under way.

We had to begin by a final crossing of the Skoro river, but this time the path was carried over a log bridge, from which the eager Pristi tumbled into the water. Beyond the torrent's stony bed we turned out of the Skoro into the Shigar valley. North and south its fertile expanse opened before us, watched by fine hills on either hand, over whose broad slopes played bright sunlight and shadows incredibly blue. There were snow-topped mountains visible in both directions to give completeness to the picture, but they were not specially lofty nor out of keeping with the general luxuriance of the foreground. The thickness and rich azure of the atmosphere smote emphatically upon our eyes. Never did distances seem bluer. White cloud-islands dappled the sky, clouds that were free and seemed

to wander at their own sweet will, instead of being tied to the flanks of peaks:

In the Shigar valley the harvest was already half reaped, and the fields were alive with busy husbandmen. *Shepherds were leading their flocks to pasture. Oxen were treading out the corn on village threshing-floors. Men were carrying off the straw in baskets. We soon struck into the main valley-road, a broad level track that one

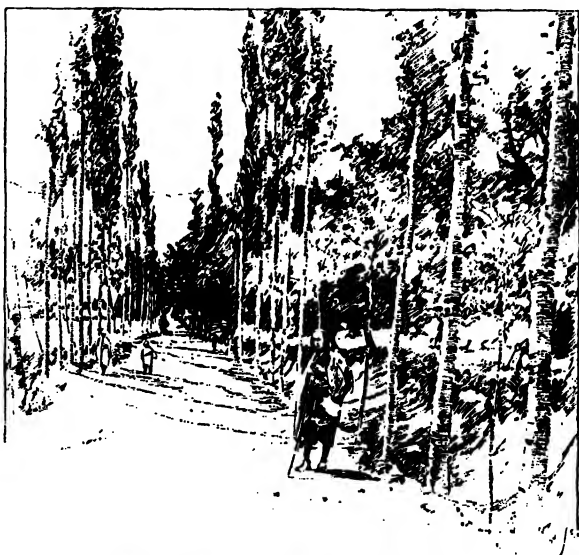


LOOKING UP THE SHIGAR VALLEY.

might drive along without discomfort. So delightfully level it appeared; and one could actually walk without looking at one's feet. How long it seemed since that had been possible! It was wide enough, too, for all to go abreast like good companions. Trees bordered the way on both sides—poplars, willows, or apricots. Now that the sun was peeping over the eastern hills the shade of trees was grateful. How beautiful the blue hills looked beyond the yellow fields and through the green foliage! We passed a copse of

young fruit trees already scarlet and golden in their autumn glory. Dragon-flies darted around us. Frank-faced peasants passed us on the way, with flowers in their hair—garden flowers that had been grown and tended for delight.

The road led through or near one village after another in quick succession. The houses were relatively large, and built, for the most part, of big crude bricks. Many of them had verandas; some had little wooden summer-houses on their flat roofs. There was a look of well-being abroad that entered into our hearts and harmonised with our satisfaction. Each village had its mosque, square built, with a wooden portico to the east. The mosques are not built like the houses, but their frames and angles are of wood, filled in with rubble, mud, or crude brick. We saw one in process of building, the timber



MAIN ROAD IN THE SHIGAR VALLEY.

framework alone being as yet set up. The mosque architecture here is substantially the same as in Hunza. The Shah Hamadan mosque in Srinagar is the completed type towards which they all tend. This is clearly seen in the case of the fine Shigar mosque, which is a by no means ignoble copy.

We walked briskly along, but as in a dream. The coolies kept always near us, and carried their packs willingly and without needless halts. After about an hour and a half's going we came to a particularly pretty village, with a

larger mosque than usual, which I entered and photographed. We sat down to smoke by the babbling canal, and the lambadhar came to see us, bringing a tray of ripe fruit (melons, grapes, and apricots), beautiful to look upon as they lay heaped up on the copper trencher. We must have loitered an hour there, watching the villagers as they passed and repassed, singly, or in groups following some peasant of consequence. Many were fine-looking men, and all walked with a healthy freedom of gait.

"How far is it to Shigar?" we asked the lambadhar.



IN THE SHIGAR VALLEY.

"But this is Shigar," said he. And so it was, a suburb of Shigar, Sejong by name. He was reluctant to accept the present we made him as we started to pursue our journey. There was a short interval of fields before we entered a street

of low houses and shops, forming the Shigar bazaar. The great mosque detained us for a while; then we crossed the river that comes down a grand rocky gorge from the back of Mango Gusor and the Tusserpo La. A few yards further we were upon the grassy polo-ground, broad enough for cricket and admirably flat, with a clump of splendid chinars shading a raised platform on one side.

The coolies were grouped in the shadow of the chinars, awaiting our arrival, and Rahim Ali and Samadju, the courtly *thaniadar*, met us with the request that we would be content to camp in this pleasant spot and continue our

journey to Skardo early on the morrow. The *zūk* (goat-skin raft), they said, would take some hours to prepare. There were *pashmina* merchants who had goods to show, a new set of coolies must be collected, and all this would take time. We not unwillingly agreed to the suggestion, and the tents were soon pitched (7,760 feet). The moment the coolies were paid off they started back for their homes, and we were left in peace, save for a few flies that found us out, but gave little trouble compared to the battalions of Gilgit and Nagyr. Our watches showed the time of our arrival to be 10.45.

The *pashmina* men presently surrounded the tents, but their goods were not of the first quality and their prices were exorbitant, so we did not come to terms. The *thanadar* brought us dishes of sweet fruit. They all then left us alone, to lie down and enjoy the sensation of living, the surprise of fertility being still upon us. Zurbiggen tersely summed up the facts of the situation: "It may be that some men are as well off as we now are, but it is certain that none are better." Oh! friends and beloved ones far away, had you but been there too!

"Never the time and the place and the loved one all together."

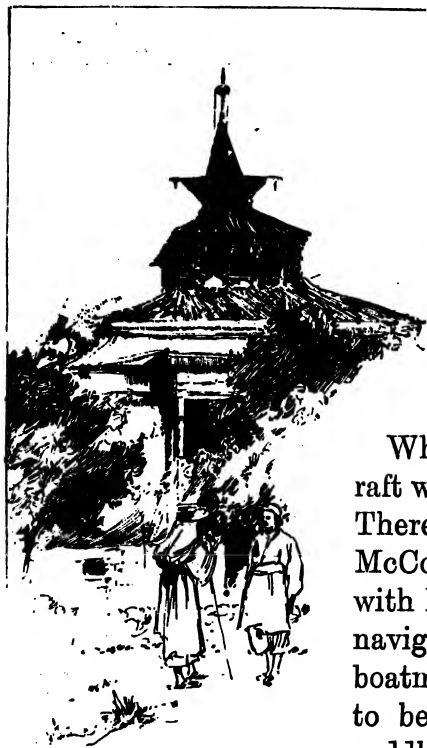
September 10th.—We sent off the coolies at seven o'clock, and ourselves half an hour later left the fine chinars that gave us shade. We wandered down towards the river, under the broad mountain shadow, passing through fields newly ploughed or where the people were threshing out the grain. A pleasant sub-consciousness of a new sensation to be experienced was upon us as we walked along, and many were our furtive glances riverward to see whether the strange craft that was to carry us to Skardo was in readiness and what it might be like. At last we dipped down from the cultivated terraces to the stony margin of the waters, where the boatmen met us.

The goatskin raft, or *zūk*, was lying bottom upwards on

the bank, and the men were giving it the needful finishing touches. It was a strange-looking object, and at a first glance resembled a collection of sheep's carcasses. Thirty distended sheepskins were tied close together against a framework of poles, like a large hurdle. One of the hind legs of each skin stuck out, reproachfully or comically (as one pleased to take it), and this was used as mouthpiece

for inflating the skin.

The end of the leg was tied up with a bit of grass or fresh willow bark. Only one or two enjoyed the luxury of string. The whole apparatus had the frailest appearance. Many of the skins leaked, and needed a final tightening before the start.



MOSQUE AT SHIGAR.

When everything was ready the raft was turned over and set afloat. There were five passengers—McCormick, Zurbriggen, and I, with Harkbir and Rahim Ali. To navigate the thing there were five boatmen, each armed with a pole, to be used for punting or as a paddle, the thick end held in the hand and the thin end put into the water. A *zuk* is not a per-

manent or even a durable thing. It is specially made for each occasion, and its size varies according to the number of persons to be carried. Like a 'Varsity boat, each *zuk* is built for its intended crew.

The five passengers and Pristi were arranged in a row down the middle, seated in orientally uncomfortable positions on the hurdle, with the skins pushing through.

When the water splashed, it came up from below and wetted us. The boatmen squatted three on one side and two on the other. A push from shore launched us on our swift and, at first, smooth passage. We passed close to some big undulations, and were glad not to make so immediate an acquaintance with broken water. All were silent and observant. Pristi looked the picture of abject misery as he crouched against us. The boatmen made up for our reserve by loud and continual chattering. They had to keep a sharp look-out ahead for the shoals and



SHIGAR.

rapids that are never many hours together in the same place. Every one had his opinion as to what should be done, and expressed it, but ultimately all obeyed the word of their leader. From time to time he would stand up to look into the future. In quiet stretches of the water all the men gave attention to the skins, blowing out those that a prod showed to be getting slack. Everywhere the current was rapid, and the banks seemed to hurry by at a spinning rate. From time to time the men rowed violently to bring their unwieldy craft to this side or the other of a succession of big waves or breakers. All the rowers on one

side kept time in their stroke, but the two sides were at variance, and for the most part rowed alternately. Once or twice we had to fight through such a series, and then the raft rocked and the water splashed about us. The experience, if exciting, was not entirely pleasant. Now and again there was water that was a mere chaos



PREPARING THE ZUK.

of waves tumbling in all directions—a general bewilderment and fluster of motion. Then we would come into smooth water, and silence would reign till the roar of an approaching rapid broke upon our ears. By degrees we gained confidence in the men. They evidently understood their business, and managed their clumsy craft with skill.

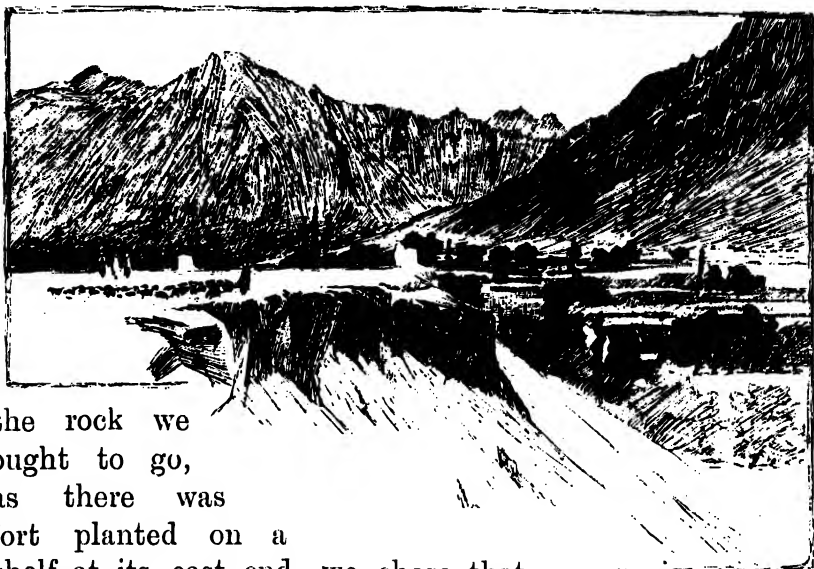
When the novelty of the motion wore off we had time to look about us. We were passing through magnificent scenery in magnificent weather. The sun was hot upon us and bright on the broad western hillsides. Islands of white cloud diversified the clear sky and cast blue shadow-patches on to the mountains. The slopes near at hand looked desert and bare, but the rich atmosphere enveloped all the distant ranges and made them fair as hope. Here and there high stripes and carpetings of reddened grass beautified the hillsides. A flock of wild ducks trailed away before us, re-started by our repeated approach.

We swept round the great bend of the river at a splendid pace, and then fought our way across to the left bank, under a rocky mound called Blukro, which looks down upon the junction of the Indus and Shigar. At this time of year, when the waters are getting low, a broad sandy flat lies under the south face of Blukro, and here our raft was brought to shore, and we were asked to land. The voyage thus far took two hours. We walked across the spit of sand, while the men carried the raft on their shoulders—a light burden. In a quarter of an hour we were by the Indus' bank, a short distance above the junction of the rivers. The lightly-clad boatmen, as they stood on the shore, were bright against the smooth dark waters, which cast back the shadows from the shadowed eastern hills. The flat sand was burning bright, and the light air enveloped all things in its glow. Grand mountain groups surrounded us. The imposing valley swept nobly up towards Tibet. Look where we might, every vista was sublime.

We seated ourselves on the raft again, and the men, walking on the bank or wading in the shallow waters, towed it laboriously up-stream. Bank and bed were full of quicksands, into which they sank to the knee at every step. When the bank became good we again disembarked to lighten their labour, till they brought the raft high enough for their purposes. Then we started away

and rowed hard for the opposite shore. In seven minutes we came to land almost over against the mouth of the Shigar river. It was just half an hour after noon. We paid the boatmen, and left them to ferry their craft back and carry its materials home by the hot road.

A stretch of sand lay before us, and beyond it the green surroundings of a village, nestling at the base of the great crag which rises between many-levelled Skardo and the junction of the rivers. Not knowing which way round



SKARDO.

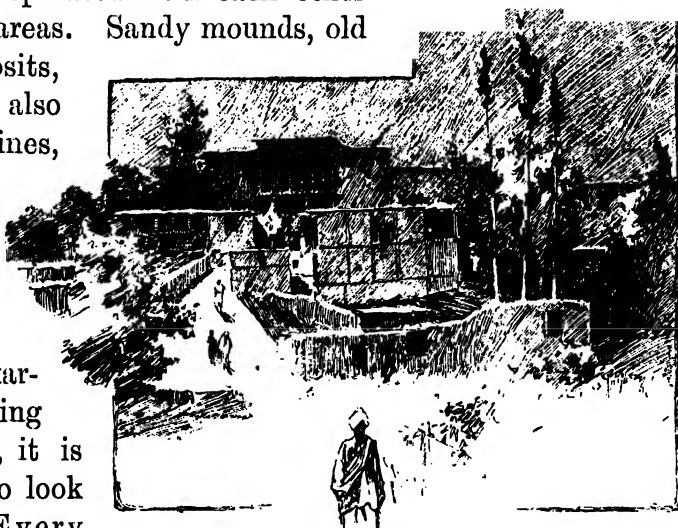
the rock we ought to go, as there was a fort planted on a shelf at its east end, we chose that direction, and for once chose right.

Beyond the sand flat we came to rough herbage beside a clear backwater. The whole place was full of life. Butterflies in thousands fluttered around us, the commonest being *Hipparchia parisatis*, the same that was caught at the Punmah anglè *parri*. Flying grasshoppers sprang away from us, displaying the brightest blue wings. A hoopoe got up under our feet. All Nature was gay in the blazing noon.

A track brought us to the end of the rock, where it juts into the river, and a carved-out staircase led up round the *parri*. At the foot of it, in the shadow of a cleft, close to the pathway, was a buff-coloured speckled

owl, with long ears, fast asleep. He let us come within three yards of him before he could persuade himself to move, and then he flew but a short distance, a golden object in the sunlight. As we mounted above the river the view developed, and the broad waters seemed to spread away from our feet. Turning a corner, Skardo was before us, not picturesque, though gorgeously surrounded by bare mountains of admirable outline. Its fields and house clumps are patched about at various levels. Nowhere does it concentrate into a village. The cultivated lands are separated from each other by desert areas. Sandy mounds, old

lake deposits, perhaps also old moraines, divide the country without diversifying it. But if Skardo is nothing to look at, it is splendid to look from. Every point commands



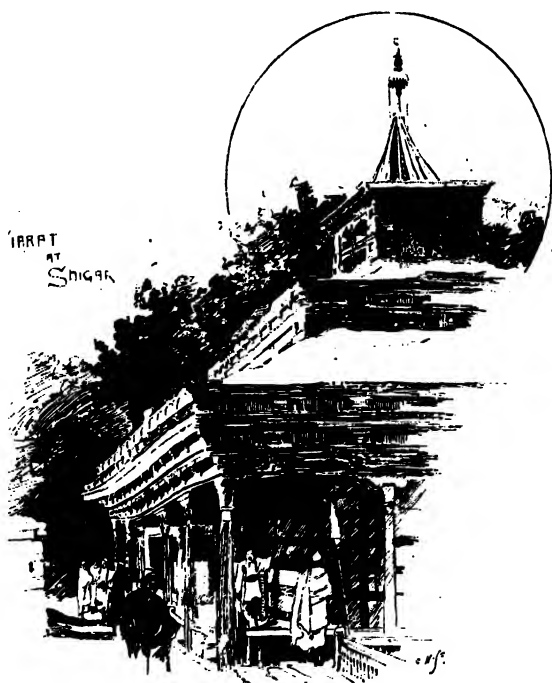
SKARDO.

a view that holds the eye. Nowhere are more numerous and varied mountain pictures brought together. Nowhere do so many near hills break the panorama more kindly. Nowhere is the atmosphere more rich, or the colouring more superb.

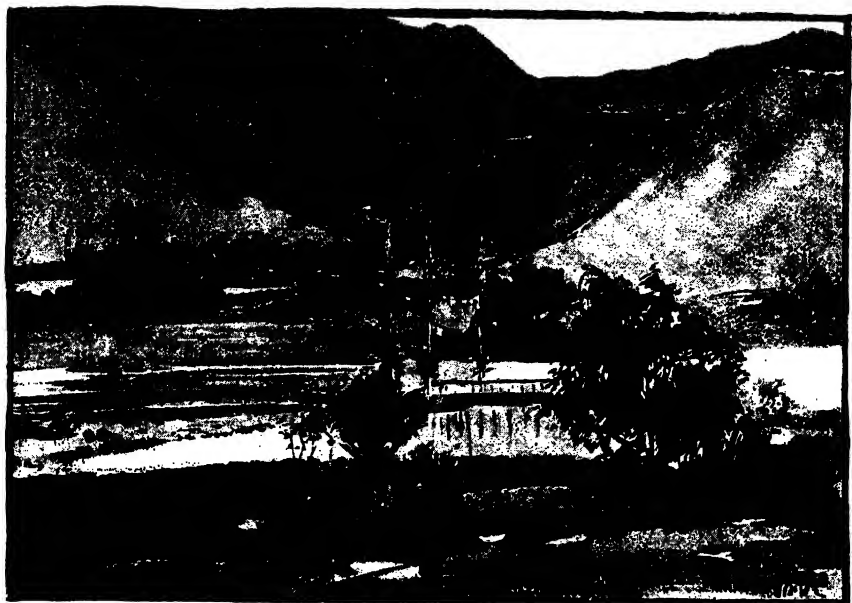
Our first visit was to the post-office, where an accumulated mail awaited us; our next to the house of the tehsildar, in whose precincts we took up our quarters (7,470 feet). We paid a visit to the hearty official, and entered at once into amicable relations with him. We were whiling away with him some of the hungry waiting time till the coolies should come, when we suddenly remem-

bered that there were our own provision stores in his cellars. We caused them to be produced, and extemporised a lunch.

The afternoon was devoted to the baggage and to writing. Towards evening I went to the polo-ground and watched the game. Close to the ground is a built-up platform round a chinar tree, and amongst the stones I noticed some fragments of old Kashmiri carving, doubtless brought from a destroyed temple hereabouts. I could learn nothing about them. We settled down for the night in a room, with walls around us and a roof once more over our heads, but the change from our airy tents was not specially agreeable, though for purposes of packing it was convenient. The night was too hot and close, and the air seemed to press upon us like a leaden weight. A gale of wind roared through the bending trees. We slept on bedsteads and felt that our mountain wanderings were over.



ZIARAT AT SHIGAR.



FROM KARGIL CAMP.

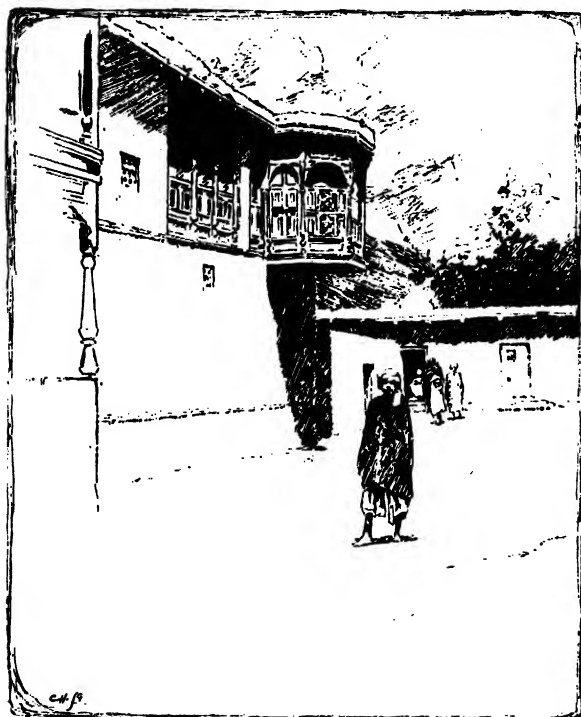
CHAPTER XXVI.

SKARDO TO KARGIL.

September 13th.—This was the day fixed for our departure from Skardo, but when the morning came it was we who seemed to be the fixture, owing to the difficulty of getting a cheque cashed. I paid the tehsildar yet another visit, and ultimately succeeded in extracting 200 rupees from him, or rather through him from the village banias. The money did not arrive till noon. When it came the twenty coolies and four ponies with baggage for Srinagar were promptly sent off, and we started at the same time with other twenty coolies. The Srinagar baggage was to go direct by way of the Deosai passes.

It was a quarter-past one when we mounted our ponies, and, passing through the tehsildar's *temenos*, set off for Leh.

At first the road was a broad avenue, such as might be found on the outskirts of an Indian city. It led straight across the alluvial plateau on which Skardo stands. This plateau seems to contain and almost cover plenteous moraines, and many large blocks lie upon it. When we reached its eastern edge the road became bad and descended steeply to a lower level, likewise of alluvial deposit. A



THE TEHSILDAR'S HOUSE AT SKARDO.

straight avenue led over this flat ground to the edge of a large cultivated fan. Riding along at a foot pace we had plenty of time to look about. Southwards was the granite mountain-wall that forms the northern face of the Deosai region. Behind us were the curious Gibraltar-like rocks that rise in the

midst of the old lake-basin of Skardo. They divide the present from more ancient channels of the Indus, and doubtless owe their form in some degree to the action of ice. The top of Blukro seems to have been planed off by ice and afterwards to have had a moraine deposited on it. Before us were new regions of desolate valley, with a green fan here and there pushing down into it, but these fans, though actually large, are so small in comparison with the great size of the landscape, that they rather emphasise than

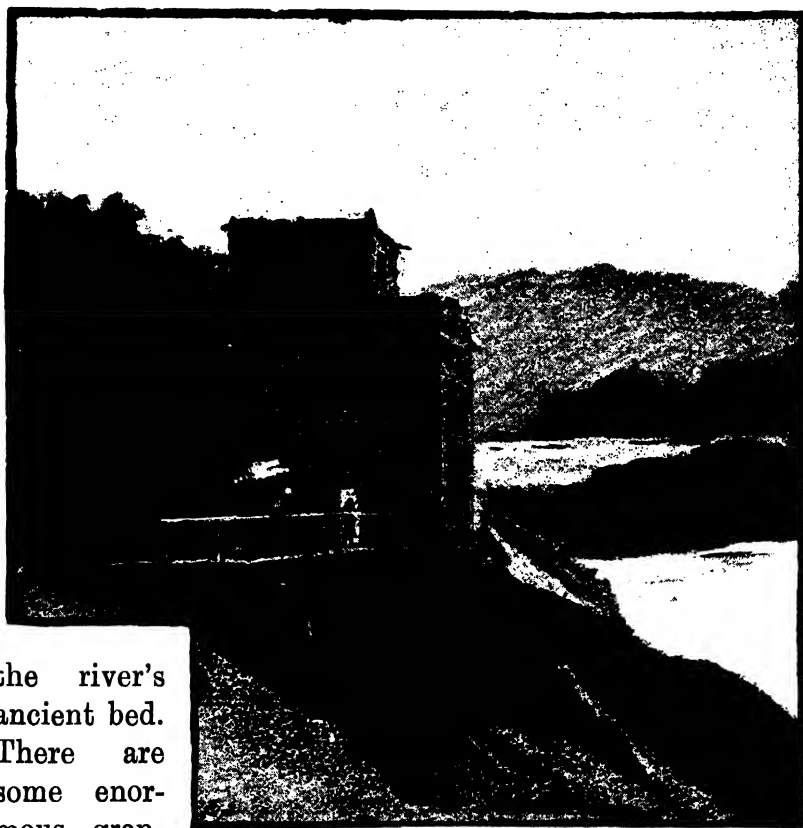
remove the aspect of desolation. Ahead, fine purple mountains plunged their summits into a soft bed of cloud that covered almost all the sky. Across the Indus the broad valley-floor was occupied by rolling sand-hills, whose form showed the direction of the prevalent winds.

An hour after starting we entered the village of the first fan. Much waste land is mingled amongst the fields, and the whole lacks the aspect of rich cultivation and fertility that makes the Hunza and Shigar valleys so delightful. The fields are stony and the gatherings of *débris* cleared off them are raggedly put together instead of carefully built up as in Hunza. Everywhere, as we went along, traces of former glaciation met the eye, transported blocks were plentiful, and so were old moraines, for the most part small, at the foot of the side valleys. To our surprise the heavy clouds, which usually mean nothing in these parts, poured upon us a smart shower of large-dropped rain. The sensation was agreeable.

The second hour's march closed with the passage of a steep rock-*parri*, round which passes a road, or rather staircase, giddy for horsemen. A block-house stands at the end of it, and through this the road goes. One has to dismount to pass it. Its position is highly picturesque. Beyond this fortified entrance to the basin of Skardo comes another fan, of smaller dimensions than the preceding, occupied by a scattered village and stony fields. The stream that feeds it descends from the hills in a finely-launched waterfall. Hence, looking across the Indus, we gained an unexpected glimpse into the Skoro valley, and recognised from afar the formation of green rock, over whose lower slopes we had so toilsome a march. Ahead of us a rainbow spanned the face of the jutting mountain promontory, round which the Indus makes one of its great bends. We began to wonder where our camping-ground was to be, and whether we must camp in the desert. A bend in the ground soon dissolved the doubt by disclosing yet another and smaller fan, greener than its predecessors, that was awaiting

us at no great distance. We entered its pleasant fields, and at four o'clock dismounted in the flat and shady *bagh* of Thurgon (7,530 feet). We had two hours to wait before the coolies came in.

Towards sunset I wandered down to the Indus' bank, across the desert of sand and rounded stones, which formed



the river's ancient bed. There are some enormous granite boulders hereabouts.

FORT ON THE INDUS ROAD NEAR SKARDO.

In one place three of them are grouped together forming a sort of cave. These boulders seem to have attracted the attention of the ancient inhabitants of the valley, for they are inscribed all over with rude outline figures of ibex, adorned with extravagantly large horns. There were also some designs resembling ladders with a pair

of horns on top, or something like them. One ladder seemed to be surmounted by flames. There was a single representation of a formal tree, but the ibex figures were more numerous than anything else. The age of these outlines was obvious; they were of the same dark sunburnt brown as the rock. In places where the brown surface had come away the figures had also gone, and only faint traces could here and there be perceived of their former existence. They reminded me of the prehistoric outline figures on the rocks at El Kab, near the Nile. Pre-Islamitic they certainly are. The villagers call the boulders *Ordokusk*, which appears to mean "carved" or "cut stone." I could not find that they had any legend about them; they denied having any, and said that they were very old, and that the memory of anything about them had passed away.

September 14th.—We started comfortably at eight o'clock, riding the same ponies as on the previous day. The road followed the telegraph line, which looks out of place in the wilderness. Numerous stone men decorated such summits of the lower hills as are visible from the valley. On many big fallen blocks were collections of stones obviously placed there by human hands for the mere fun of the thing, and with no utilitarian object. They were often arranged in lines following the contours of the rock. The road lay as usual through utter desert, and the desolation increased as we approached the bend of the river. In an hour we came to a big *parri* round which the road was well carried. This brought us to a stony maidan at the river's bend. On the opposite bank there were the long stretching fields and shady places of Nurr, spreading between the river bank and the bare hillside for a mile or more. When we had well turned the corner we looked out for the fakir's hut marked on the map, but the place knows him no more. In his stead there reigns the useful and ubiquitous *dāk wala*.

Here we caught up the coolies, one of the best lot of men we employed. They were going at a great pace, and the man who carried the two tents ran beside my pony for a

long distance, and kept up a voluble conversation with me. Beyond the end of Nurr the valley becomes altogether barren. On our side of the river fallen blocks of great size were numerous, and many little stone huts were built against them—travellers' shelters of all dates. Several such huts clustered around one block of extra large dimensions almost opposite the village of Ghoro, which we came over against in two hours and a half from starting. Ghoro is a cluster of cultivated plateaus, strikingly situated at the mouth of a narrow side valley. Many of the carefully terraced fields on the outskirts of the group had gone out of cultivation, apparently quite recently, for their walls were trim and neat. There was a similar retrenchment of the cultivated area at the edge of all the villages we passed through this day. It may have been the result of the previous winter's slight snowfall.

We looked out anxiously for Gol, the end of the morning *parao*, and presently it came in sight, but we did not perceive how large a place it is until we were close on to it, for it is sheltered from the north by *dibris* and moraine accumulations. Amongst the great blocks of stone, between which the road passes as it enters the cultivation, we again noticed quantities of ibex engraved on the biggest stones. All of them were old. A few drops of rain began to fall, and several smart showers descended during the middle part of the day, an especially heavy one coming while we were seated at lunch. The fields of Gol are patched about amongst large ancient moraines in a way that at once reminded us of Fakkar in Nagyr. The whole place is picturesque and admirably tilled. We reached the mosque at noon, and halted for an hour till the coolies came up.

We were now come to a country in which the mosque type is different from that found north of Skardo. The Gol mosque may be taken as an example of the change. It is relatively lower and flatter than the Shigar-Nagyr mosque. Its walls are built of mud. Its roof is carried on long beams transverse to the axis of the building, and each beam is supported on a row of columns. There is no emphasised central

square with four columns round it and a lantern above, as in the other type; here the centre is occupied by a column more ornamental than the rest, and standing right between the door and the *mihrab*. The other columns are of all sorts, oblong and polygonal in section. Cap, column, and base are carved from one log. There is a portico along the east wall. For external finish there is a kind of double corbelled arrangement of beam ends and beams, where roof and walls join. The carving about doors, capitals, and the like is of a style that was new to us. It affects foliation and flowers rather than geometrical designs. Outside the mosque, on the east, is the *meydah*, a collection of round walled latrines — numerous, obvious, and large.

We lunched in the pleasant *bagh* and left



GOL MOSQUE.

again, with a new lot of coolies and ponies, at two o'clock. For a considerable distance we continued amongst the fields of Gol, before re-entering the desert with its crop of round-headed prickly thistles (*Echinops cornigerus*). Where the valley bends to the east there was a fine view back towards Gol and Nurr. Forwards we saw straight up to Kiris on the Shyok, nor was it easy to discover where the course of the Indus lay. Presently we noted the cleft on the right, through which the river has broken an entrance into the valley,

orographically belonging to the Shyok. A little more than an hour's march from Gol took us to the angle of junction and we again turned due south and mounted a precipitous *parri* by a well-built staircase road. From the top of it there was a glorious view over the meeting of the rivers where a party of natives were crossing on a skin-raft.

The Indus, above the junction, is a conspicuously smaller river than below, and its diminished waters flow through a narrow gorge, so that the effect of the whole is of a stream no larger than the Braldo at Askole. The valley, too, is on a reduced scale; it is narrower, and the visible hill-crests on either side are lower than is the case with the Shyok valley. In the gorge above the junction there remain the piers of an old native bridge which used to span the waters, here flowing with a smooth, swift current. The road passed under the face of a recent sand deposit, such as is common all the way from Skardo to this point. The sand cliff is covered in many parts with modern *graffiti*—roughly outlined hands and Koranic phrases—but there are neither ibex nor ladders. Another *parri* was in waiting for us, over against a big ancient moraine, and then we came to the large collection of villages and all the long terraced fields of Sermi. Entering the place among the big granite boulders and shady walnut trees, with rippling canals running amongst the little fields, was like entering many a north Italian Alpine village. To each group of houses belongs a mosque of the type above described, and there is one good *ziarat* with wooden lattice windows and a portico all round the building. This is the regular local type of *ziarat*, and is wholly different from the local mosque type.

We must have been more than half an hour passing through Sermi and the poplar avenue that leads from it into the desert. Not far beyond we came to a fertile enclosure, walled high about and surrounded with poplar trees. There was something of circumstance about its large wooden porticoed gateway. Within, it was planted with many trees, but contained no house. Between it and the

river was a fine grown poplar avenue, that lives on the spare waters of the garden. Then came desert again and *parris*, and, after an interval, the village of Kuzburthang,* whose fields were almost all barren and uncultivated for evident lack of water. The canal was supplying a mere dribble, only sufficient for a small central oasis. Desolation swallowed up the rest, and the people were gone elsewhere.

Not far beyond this melancholy place we came, when the sun was already set, to fertile Sahling, which is the northern portion of Parkutta. It is backed by great old moraines from the long gone Katicho glacier. We crossed its well-tended polo-ground and wound about amongst fields to the bridge over the side stream. A five minutes' pull uphill, under the water- and ice-worn granite rock, on which the village of Parkutta is so finely situated, brought us to the chinar tree where the village elders meet. Instead of camping there we followed the advice of our local hosts and went five minutes further to a flat and shady *bagh* (7,870 feet), where, at seven o'clock, we settled down, as night was coming on, to await the arrival of the coolies. They came in late, one by one, but ultimately all arrived and we were able to begin and do our evening work in peace. In the night there was a great storm, accompanied by thunder—a rare phenomenon here. Rain descended in sheets upon the tents, and fresh snow was low down on the hills. The temperature sank to 39° Fahr., the lowest we had experienced since leaving the glaciers.

September 15th.—The freshness of the bright morning after the stormy night made us all alert at an early hour, but we did not quit the camping-ground till past half-past seven. We had a charming ride through the long cultivation of Parkutta before entering the desert beyond. About a mile to the south the valley bends eastwards, and all around the bend the enclosing hills are, in their upper portions, much grassier than any we had seen for a long time. In an hour we reached the edge of the fields of Mantoka, and ten

* This name is taken from the map, and is probably wrong.

minutes later the first of the series of villages that thrive on its large and well-watered strip of fertile land. The colouring all the way was most beautiful. A charming light played over trees and fields, and for background*there was always the blue wall of the shadowed mountains that overhang the gorge beyond. In the first village there was a small new wooden Matam Sara of the Shigar-Hunza type. The houses were built with more wood than is common in the villages of this valley, and several had pretty lattice windows of patterned fretwork. In the midst of the main village there are two mosques, one small and aged, with a central column, the other new and lofty with four high columns in the midst and a lantern above—a building, therefore, of the Shah Hamadan type. Both, of course, have porches on the east, and both are corniced with double corbelling.

As I was inspecting these mosques a small bright boy joined himself to me and preceded me during my passage of his oasis. He led me through the village and its fields and pointed out the position of the ford over the side stream that forms the local wealth. Five minutes further on we came to the hamlet of Charok. A quarter of an hour later we reached Ghahori and the end of the cultivation, and there my young companion took leave of me. I galloped across a plain of sand to catch up my companions, who were far in advance. The valley rapidly narrowed and became increasingly impressive, closely shut in as it was by lofty slopes of rock dignified with purple shadows. The road has recently been much improved, and some cutting of the rocks has enabled it to be carried low down by the water, thus avoiding the great *détour* that here used to be necessary. One long *parri* alone remains which has to be climbed over by a series of staircases. Beyond it the river again bends to the east, and thus a fine vista is obtained at the angle both eastwards and northwards. The sun was now high and the shadows fewer and less rich, but the water, green here, grey there, compensated with its colour for the lost tones of

shade, and the mountain-sides were likewise beautiful with all manner of ochreous tints, besides being grand in form. The river was no longer so dirty as earlier in the season ; a single cup of its water was, as we found, apparently clear. A cup of Gilgit river water used to deposit half an inch of mud.

A quarter of an hour before noon we halted under the chinars by the two old mosques of Kumango. Near at hand is a newly built mosque of the Hamadan type, which is evidently becoming fashionable hereabouts. After a brief halt we pursued our journey, climbing over the usual *parri*, and thus in an hour approaching the village of Tolti (8,450 feet) where the *parao* ends. The petty local raja's new-built house, on the summit of a rock, was visible from afar. It is fitted with old lattice windows. There is a kind of summer-house or portico on the roof at one end, projecting far outwards, and the beams were in place to carry another like it. At one o'clock we halted under the chinar of assembly before the old mosque. It is of the low central columned type, and appears to be no longer used. A fakir was asleep in its veranda, and over his body I entered the building. There was a grave in the floor. As we were unable to get a fresh supply of coolies at Tolti, because the men were all at work in the hills, there was no choice but to pitch camp and await their return. We lunched while the tents were being set up, and the little fakir, foully ragged and dirty, crouched near us on his haunches and hoped rather



THE FAKIR OF TOLTI.

than asked for alms. The villagers seemed to be proud of him, but he wholly failed to excite the respect of our Moslem servants, who ordered him off in the most infidel manner.

It was pleasant to have an afternoon's rest in the tent, pitched on a platform overhanging a noisy stream of clear water, with the mountains rising up boldly beyond, and the white clouds drifting across the blue sky. Doubtless the pleasure was not confined to ourselves, for the Gurkhas must have been tired after the forced marches of the last two days. The Raja came to call in the evening; he was not a bright specimen of humanity. He inquired of the way from Kapalu to Yarkand, about which he heard that Nazar Ali had told us. He asked to have his photograph taken, but it was then too late, twilight having already come on. I told him to call again before we started next morning.

September 16th.—We left Raja Mohammad Ali Khan and the chinars a little before half-past seven o'clock. There are two routes from Tolti, one along either bank of the river, which is spanned by a rope-bridge both at Tolti and at Khurmang, the other end of the *parao*. The right bank route is much the more level and apparently the best, but of course the ponies could not take it because of the *jhulas*. We preferred to stick to our beasts.

We started up the steep hillside above Tolti, and mounted rapidly for half an hour, thus reaching a point about 1,000 feet above the river, where we were able to mount our ponies. During the ascent the view developed behind us. We overlooked the whole of Tolti and its ruined forts. The cultivation extends in a narrow strip far up the side valley of Kusuru, where it is lost to sight between lofty cliffs in a wild corner. As we rounded over on to the leveller ground above, the breadth of the valley expanded, and we experienced relief from the sensation of being shut in by impending cliffs. The valley, however narrow in its hidden gorge below, was wide and airy in its upper regions. Throughout

all the ascent we passed over nothing but beds of water-rolled stones mixed with fallen and water-worn masses of rock. Now we emerged on the higher hillside and began to traverse a sort of moorland region, sparsely covered with herbage. On our right was the hillslope, on our left the rounded and worn-down crest of what looked like an ancient moraine, similar to others we passed during the day. A peppering of fresh snow covered the highest visible crests of rock to the north. We followed the undulating upland and the narrowing and steepening slopes beyond it for an hour, the path being in many places nothing but a giddy staircase. Towards the end we had to make a yet higher ascent, and then came the zigzags downwards to the river-side. The descent took forty minutes to the level ground at the little village and few fields of Dochu. A small *parri* and short stretch of desert separated them from the larger oasis of Gamba Do, which was crossed in twenty minutes.

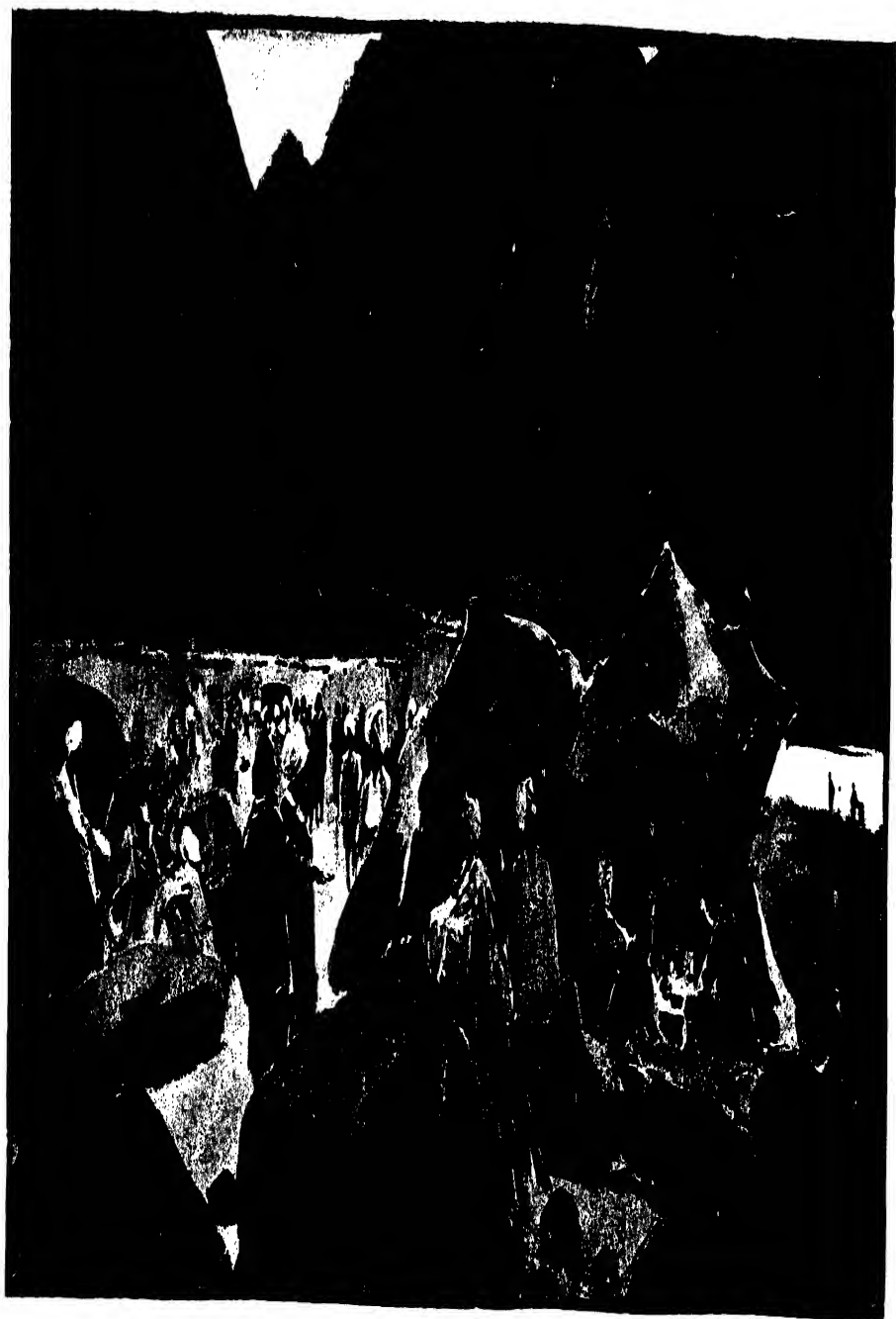
We exchanged this pleasantly green and shady land for a gorge, more savage than usual, and utterly barren along the left bank, but the opposite side was diversified by a series of large and prosperous villages which succeeded one another as far as Khurmang. Near the second of them a many-branching waterfall, the most copious we saw in Kashmir, tumbles into the Indus, and at its foot the Indus itself plunges in a single white wave over a drop of about twenty feet, and then races down a rapid. It is a striking scene. After more than an hour of toilsome and now hungry advance over a wilderness of immense fallen blocks, interspersed with sand, we came in sight of the rope-bridge over against Khurmang. A single tree and an overhanging rock, with a flattened area below them and sheltering walls, invited a halt. McCormick and I awaited the others for more than an hour. When they came up we went on together for the remaining ten minutes of the way, to the proper camping-ground at the end of the long rope-bridge (8,340 feet).

It was a sandy flat amongst large fallen *débris*, already

occupied by a detachment of Kashmiri sepoy on their way to Skardo. Ravenously hungry, we had to wait for a whole hour before the tired coolies came in. We found that it was then too late to do a second *parao* before dark, so pitched camp and prepared for a lazy afternoon. During the course of it I went out to photograph. A young Kashmiri officer, a mere boy, came with me, and prattled by my side. He had his opinions about everything, knew where all the best points of view were to be found, and gave me his ideas with the utmost generosity and unreserve. He had all the airs and ways of a French lad of his age. The adjutant sent us presents of apples and vegetable-marrows, and made such arrangements as he could for our comfort in the vicinity of his men. The evening was enlivened by many a bugle call. When I turned in, the camp fires were blazing merrily and the men were picturesquely grouped about them.

September 17th.—At dawn, after a cold and cloudy night, we found fresh snow fallen on the heights. The mantle of mist was still heavy over the sky, and a few drops of rain fell at intervals, and so continued during most of the day. The soldiers were up early, preparing to move, and the noise they made would have awakened the dead. They started on their day's march about half-past six, and we left our camping-ground a few minutes later. We were able to tell the adjutant before he left that he had an evil bit of road before him, and he retorted with similar unwelcome information. At starting, things were not so bad. The road led through a stony tract along the river's bank. The air felt heavy, and the sky had a threatening appearance, so that a feeling of gloom settled upon me, and the barren precipitous cliffs that shut us in did not tend to remove it.

There is a monotony of bare grandeur about this Indus valley with its great mountain-sides, all of one kind, its succession of precipices, its steep stone slopes and side gullies, its wildernesses of broken and fallen rocks, and the



KASHMIRI SEPOYS ENCAMPED AT KHURMANG.

booming river always sweeping along below in changeless dignity. The fertile oases are all much alike, and so are the *parris* that one after another have to be surmounted. Now and again we came across a green pool of water left under some cliff by the autumnal shrinkage of the river, but such gems of bright colour were rare in the desert reaches, where nothing disturbs the monotony of the grey sand below, the ochreous granite on either hand, and the purple hills ahead and behind.

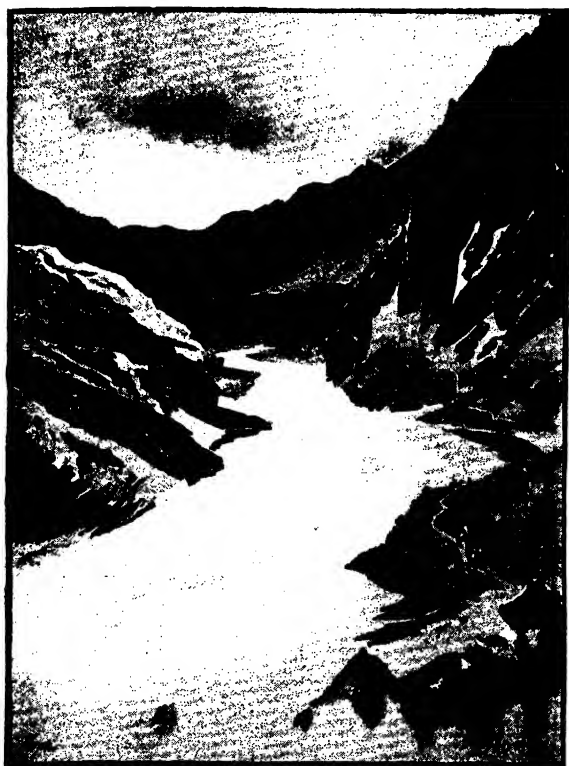
The first half-mile of the march took us opposite the residence of the local Raja, boldly planted on the top of a precipitous rock, the approach to which is guarded by a fort and ancient walls. In former times this must have been a strong place. Now the Raja has built himself a modern and commodious habitation on the flat land by the river's bank, where, too, he has a garden and pavilions, and no doubt enjoys life after the manner of the Orientals. The old house on the rock's top seems to be going to ruin. It resembles the Raja's palaces at Baltit and Nagyr, and belongs to a bygone day of local independence.

It is not necessary to describe the succession of *parris*, sand-flats, and occasional fans that were traversed in the day's march. They were similar to those we had already passed over, and to those that were to come. The *parris* were perhaps the worst we met with. They presented precipitous faces to the river, and were mounted or traversed by giddy paths, galleries, and staircases. The galleries often overhung the river at great heights, and the waters far down below could be seen through chinks between the logs and the stones loosely placed upon them. The staircases, utterly irregular, of course, were carried in spirals round sharp corners. It was a surprise to us to observe the skill with which the ponies deliberately ascended or descended them. Often enough a single post or tree stem, balanced, as it were, on its point on some crack of rock, was the sole angle support for a complex of beams carrying one of these galleries or staircases round some

awkward corner. It sometimes made me uncomfortable to look back at the places we had come over, though the actual passage was generally matter-of-fact enough.

The ponies were good for their work. They seemed to know the road well, and always halted where they were accustomed to have their riders dismount. They went

jauntily down staircases that it seems incredible they should be able to pass at all, and one of them literally trotted down with the line of his back apparently vertical. They are not speedy beasts, and can with difficulty be urged into a trot, but on anything like a flat plain of sand the least suggestion will set them off into sudden gallops—a trick they



LOOKING UP THE INDUS VALLEY BETWEEN GIDIAGHDO AND TARKUTTI.

have acquired from being constantly ridden for polo.

After passing the little fan of Banduko, the larger oasis of Bagicha, and laboriously terraced Gidiaghdo, we made a long ascent in order to pass above a wall of cliff. At the highest point of the ascent is Shiriting village at the mouth of the Torgun Lumba. The Shiriting plateau is covered with a deep alluvial deposit, and the slopes up to it consist of water-rolled stones, washed out probably from beds of the

same deposit, which formerly extended widely over this area, but have in process of time been degraded and carried off by the river. Such is apparently the origin of the many slopes (1,000 feet long or more) covered and embedded with rounded water-rolled and water-worn stones of all sizes which are so common hereabouts. The Hunza valley in its present condition shows the intermediate stage through which the Indus valley has passed. The Hunza river flows down a gorge between alluvial cliffs. The ancient alluvial cliffs of the Indus practically exist no more. It is only here and there at high altitudes that a fragment of them remains.

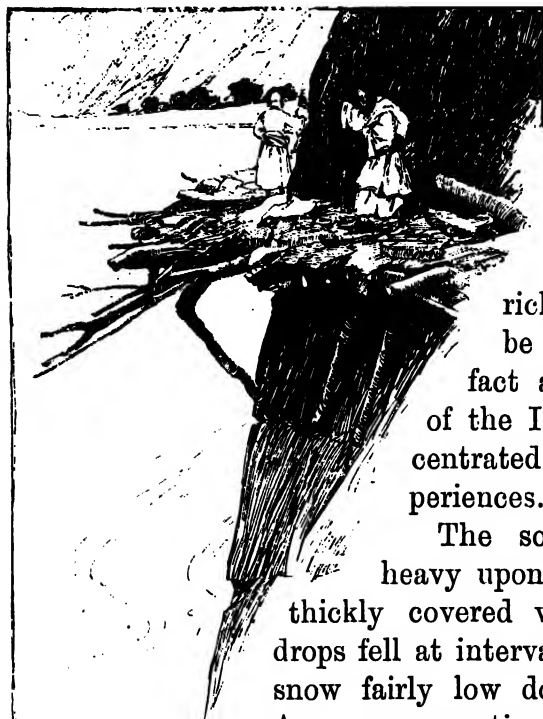
A long descent and another *parri* intervene between Shiring and Tarkutti, where the march ends. We came to the camping-ground (8,640 feet) shortly before noon, and hoped to accomplish another *parao* after a halt for lunch; but, on inquiry, we found that the soldiers had swept the countryside clear of coolies and ponies, and when our men came in they were tired, and had evidently done as much as could be expected of them in a day. There was nothing for it, therefore, but to pitch the tents and hope to make better progress on the morrow.

In the afternoon, as usual, we slept heavily. There seemed to be no end to our capacity for sleep since reaching lower levels and heavier air. A compulsion appeared to be upon us which there was no resisting. But for sleep, these long afternoons of enforced inaction would be very dull. There was none of the work on hand which used to make the days pass quickly and to fill every hour with its duty. I began to experience the tedium which must hang so heavily over the mere sporting traveller.

A plague of midges made our sojourn uncomfortable. We met with them the previous day for the first time. They began to trouble us as soon as it was daylight, and continued their fiendish attentions, especially to eyes and ears, till the sun set. At night they fortunately slept.

September 18th.—We started, shortly after seven o'clock, for what proved to be the worst of all the marches up the

Indus valley. It began by ascending zigzags for twenty minutes to the upper level of the deep alluvial or mud-avalanche deposit which hangs on the hillside. Masses of similar deposit are frequent hereabouts, worn down to different levels; over these wandered our devious and uneven way. It was not that there were *parris* to be surmounted, the whole thing was *parri*, and the path was



often abominable, too steep for the weak grass-fed ponies to carry us up, and too steep for us to ride down. There were gal-

leries, even more rickety than usual, to be got round, and in fact all the disagreeables of the Indus path were concentrated into the day's experiences.

The soft sultry air hung heavy upon us. The sky was thickly covered with clouds. Rain-drops fell at intervals. There was fresh snow fairly low down on all the hills. As a compensation, the distances were dyed with the richest purples of all varieties of tone. After two hours' tra-

velling we were again not far above the river's bank, amongst the trees and barren fields of Mangsang, which, like so many other places in the valley, suffered this year from the drying up of the stream that is its life. Mangsang is a collection of miserable hovels, and does not appear to be properly a village. It is an appendage to one of the neighbouring villages, and is only temporarily inhabited when the fields are being cultivated.

THE INDUS ROAD ABOVE
TARKUTTI.

From Mangsang the road steadily rises to pass at a high level round the angle into the Dras valley. It commands some splendid views both up and down stream. Immediately beneath this great *parri* there is a ridge of rock, curiously like a monstrous crocodile, rising in the midst of the valley. It separates the present from an ancient channel of the Indus, and lies below the large village of Maroll on the right bank. Not far above the Crocodile's snout the Dras and Indus rivers meet. When we passed, the Dras was bringing down the larger volume of water. The Indus was in colour a muddy grey, the Dras river a delightful blue; just at the angle of junction, there were two sapphire pools, lurking under a precipice. Not far off were similar pools formed by the Indus, but they were bluish green, and not comparable to the others for richness of colour.

An hour and a half from Mangsang we turned the corner and began journeying up the Dras valley's left bank. The valley opened before us and was of little beauty. Its granite sides are like those of the Indus valley, only less bold in slope, and the mountains on either hand and ahead are less noble in form. A glance backward, up the main trench amongst the hills, manifested the superiority of the scenery we were leaving; but it was consoling to observe that there were fewer *parris* ahead, whilst they increased in number and rapidity of succession in the upper reach of the Indus. An undulating path, along which we could ride in fair comfort, with only a few short staircases here and there, led in an hour to the large fan of Oldingthang, where there is a mud-built *serai* (9,270 feet), like those at Tarkutti and Khurmang. As usual there were no coolies in readiness, all the men being up with their goats in the mountains, so we had to arrange for camping. It was well we did so, for not only were our men two hours behind, but a heavy storm of rain broke soon after our arrival, and a continuous downpour set in, so that, when our tents came, their shelter was welcome. The villagers brought out frame bedsteads, laced with goat-hair cords, for us to sit

upon, and we borrowed them for the night. Such unwonted luxury reconciled us to the enforced dilatoriness of our journey, but we continued to hope, each day, that the next would see more rapid progress. •

September 19th.—The previous day's rain-storm had the effect of clearing the sky for the first time during many days. When the morning broke there was sunlight on the hills, and, up the valley, we caught a glimpse of a snowy peak, bright in the morning light. Clouds soon settled down upon it, but they never covered the sky, and only served by their whiteness to emphasise the blue. We sent as many coolies off early as we could, and ourselves started shortly before seven. A rough path led us down to the river, where the granite wilderness and *parris* began again; but they were not bad *parris*, nor high, and we knew that they were soon destined to come to an end, so endured them patiently. With the new lot of ponies it was hard to be patient. They were slow, stubborn, and of uneven gait—the worst we had yet struck. The saddles in this country are always old. About a hundred years ago there must have been a great saddle-making or importation, but since then the supply seems to have absolutely ceased. All saddles, therefore, are in various stages of decay, and manifest their anatomy more or less completely. First the beast's back is covered with a much folded *namdah*, or blanket, which shifts its position willingly, and often slips out unexpectedly from under the saddle. The saddle itself is formed of two pieces of wood running longitudinally and sloping to fit the beast's back. One sits on the edges of these, when the stuffing is (as frequently) a thing of the past. Two transverse members form the pommel and the curved hinder part of the seat. In the absence of stuffing, there is more or less of blanket tied over the whole. The stirrup-cords are short and will not lengthen. For bridle any odd bit of crooked iron does, with a couple of goat-hair strings for reins. The crupper always breaks, as it has often broken before. The wood of the saddle sometimes shows

signs of departed glory, in remnants of inlaid ivory. My pony this day had the worst saddle we saw. I chose it in order to avoid hearing the complaints of whoever might be on it. • The animal could only walk, and that slowly. If one dug one's heels into his sides, after the manner of the country, his mouth flopped open and he made a noise like a burst bun-bag. Our progress therefore was not swift.

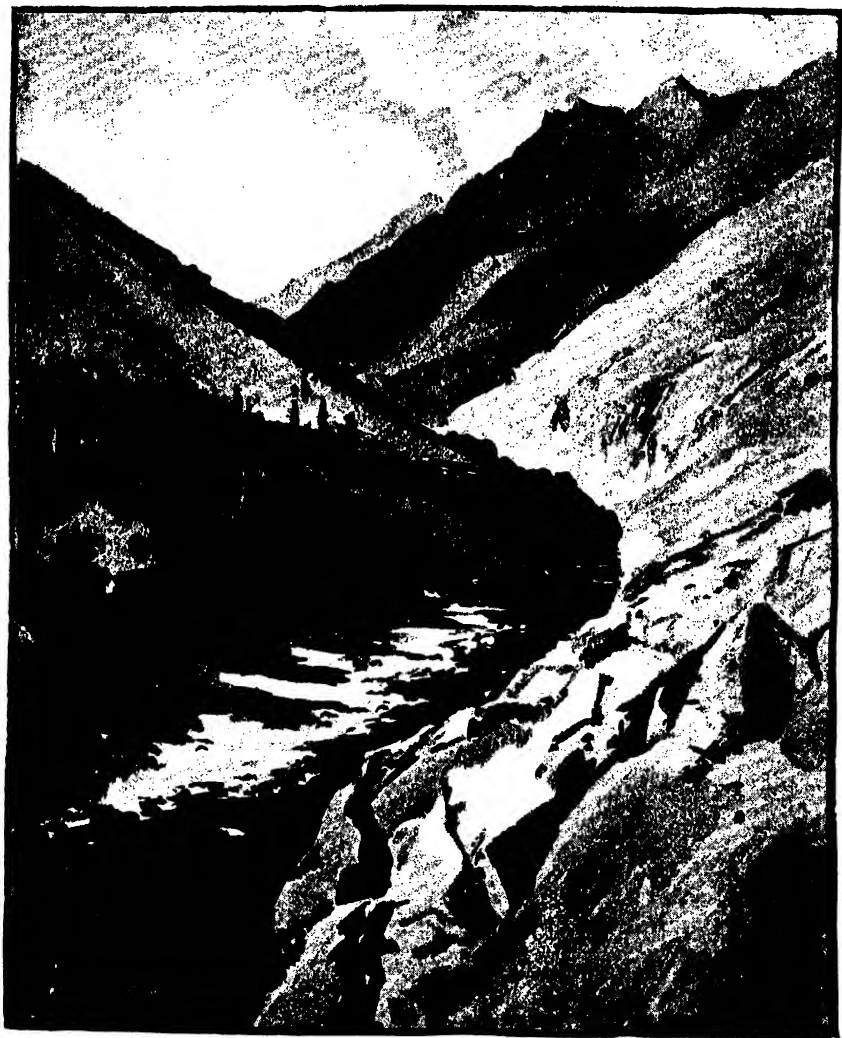
A little more than two hours brought us to the end of the *parris* and opposite the steep-rising village of Bilargo. The sun was just coming over the hill and sending its first rays amongst the trees that thickly dot the village. Everything looked fresh and bright; the waters of the rapids glinted in the sunshine; birds were flying about, and a quantity of butterflies, yellow, white, and brown, added to the animation of the scene. Specially notable were numbers of a large brown butterfly with a white edge (*Hipparchia parisatis*). It floats like a bird through the air on wings steadily outstretched, instead of fluttering in the usual indeterminate manner of its tribe.

An hour and a half further on we came to Gangan, a mean village, with Brolmo opposite to it. The sun was beginning to make its power felt, and only the photographer of the party wholly approved of its presence. It shone boldly down the hillside, picking out all the great stones in sharply defined light and shadow, and it heated the gentle slopes of sand and rubble across which our track lay, and made convection currents dance over them.

We were on the look-out for the junction of the Dras and Suru rivers, which we knew must be near at hand. A small bend in the valley presently permitted us to look up the Suru towards Kargil, and in an hour and a quarter from Gangan we came to the corner above the junction. The Suru was rather muddy, the Dras gloriously clear and blue: for the rest of the day, as we travelled along its banks, this colour was a continual delight to us. In deeps and shallows it put on every variety of tone, and, where the

brown water-worn granite of the banks was thinly covered, a purple margin framed the sapphire tide.

A trifle more than half an hour beyond the corner was

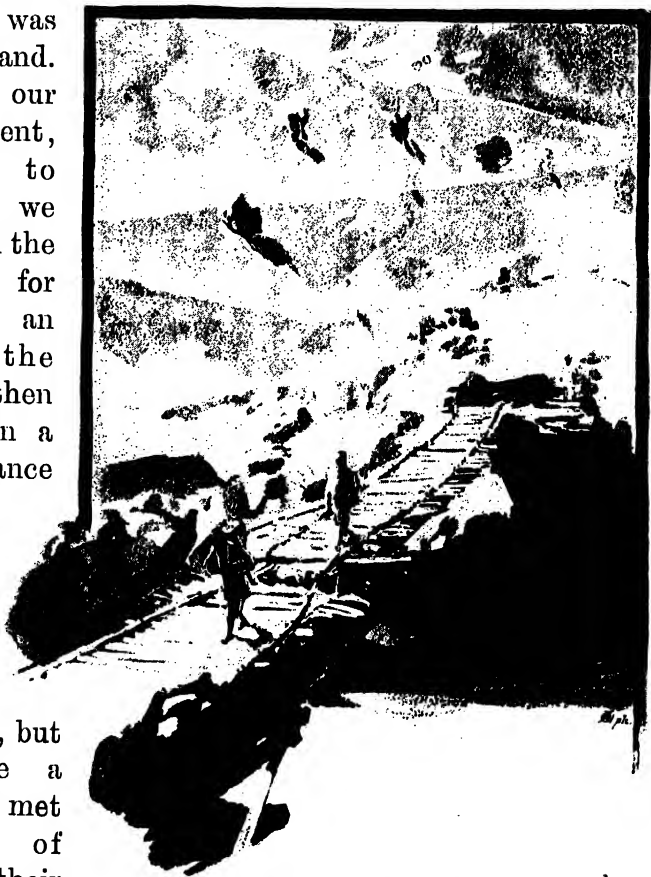


BILARGO : LOOKING UP THE DRAS.

Hardas, the end of the march. Our tiffin coolie followed closely, and we were soon settled down for lunch in the midge-infested shadow of the village *bagh*. The local band was turned out in our honour, and made such music as it

could, whilst the villagers danced one by one, and the rest clapped their hands in time.

At the end of an hour the new coolies were loaded, the old ones paid off, and we were ready to start. Just across the river we saw the Leh road which we were to follow, and we thought that the bridge was near at hand. Great was our disappointment, therefore, to find that we must ascend the Dras river for more than an hour to the bridge, and then return again a similar distance along the opposite bank. The new ponies were little better than the old, but they were a change. We met a number of people on their way to Skardo,



DRAS BRIDGE ABOVE HARDAS.

some coming from Yarkand, most from Kashmir. The Yarkandis were a pleasant-looking lot, quaintly dressed, and armed with polite salutations. At three o'clock we descended to the bridge, a frail-looking wooden cantilever, of the kind common in Switzerland, and most mountain countries, but without any sides or balustrades at all. It bent and wobbled as we walked over it.

We had now finally shaken the dust of Baltistan from our feet, and were upon the road between Leh and Srinagar—one of the chief Central Asian highways. That it is a better made and better cared-for road than the horrible Skardo track was immediately apparent. The needful zigzags



THE INDUS ROAD.

opposite Hardas and over the low rock *parri* at the angle of the rivers are well gradiented and built. As we approached the meeting of the waters the sun went behind the hills; a cool air came along from the south, and a delicious shadow from the west. I halted alone at the corner for a quarter of an hour to listen to the water, babbling over the shallows, and

to enjoy the views, which, without being grand, were fine enough (as always in these parts) if one was in the mood for seeing the fineness in them. A dâk boy came by with his important burden. He was followed by a ragged, light-hearted native, rushing along with his limbs wide scattered at all angles, and brandishing a club, wherewith he played imaginary polo with the stones in his path.

When I resumed my way the others were far ahead, but my pony took the strange fancy to canter, so we caught up with them quickly, and found them resting under a big stone from the top of which Pristi had just fallen on to McCormick's head, to the discomfiture of both. All the way along the opposite or right bank of the Suru river cultivation extended, broader or narrower, almost to the river's mouth. It shrunk to a slender green thread round a corner, and then broadened out into the large area of Kargil. Round Kargil are the immense remains of lacustrine terraces, jutting like vast railway embankments into the valley. The level surfaces of some of these on the left bank of the Suru are likewise green with cultivation.

It was almost six o'clock when we reached Kargil bridge, and the pink evening lights and purple shadows on the hills, with the grey slopes for foreground, made a lovely picture. Upwards the valley opens out, and a wide spreading mountain of moderate altitude fills the distance with its graceful form. Instead of crossing the bridge to the fort, we mounted a short slope, past the two shops of the village, and so came to the traveller's *serai* (9,160 feet), where an official greeted us. It is the best native *serai* we had seen, a portico within it having even some slight architectural merit. We chose a terrace outside for our tents, and when that had been swept and wood collected for a fire, the coolies surprised us by coming in. A busy evening closed the busy day, for we had luggage to leave behind, consisting of such things as could be dispensed with for the next fortnight.*

* The distance from Kargil to Leh is 117 miles, divided into seven marches.



MAIDAN ABOVE KARGIL.

CHAPTER XXVII.

KARGIL TO LEH.

September 20th.—Our morning start was delayed by baggage and pony difficulties. We had four packages to prepare for leaving behind. Henceforward the baggage was to be carried by ponies, and the loads had to be rearranged. Ultimately we and our things were successfully started. Descending the hill and crossing the bridge we were finally under way by eight o'clock. It was a delightful morning, the air fresh, the sun bright, all things attractive and enjoyable. For the third day running we entered a new valley: this time it was that of the Wakkha river, a small tributary of the Suru. Everything about us seemed new. The valley was wide and open, the scenery of a novel

character, and the folk evidently not Baltis. They are, in fact, Islamite Ladakis, Kargil being the capital of a small state of such, called Purik.

The wide valley, in which the Suru and Wakkha join, is piled to a great height with lacustrine and alluvial *débris*, and broad high shelves of mud-avalanche deposit are to be seen a long way up the Wakkha. Immediately after crossing the Suru, we had to mount a long slope to the level upper surface of the alluvium. As we were mounting, in the shadow of the slope, a caravan of mules laden with Yarkand merchandise came down towards us. The sun shining behind them just caught the cloud of dust they raised, and surrounded them with a halo of glory. The gold of Central Asia seemed to be on the way.

When we reached the top of the ascent, a broad rolling country lay before us, to the foot of finely coloured mountains of noble form on either hand, and narrowing ahead into the valley we were about to ascend. The Nikpal hill, whose beauty so attracted us the previous evening, was a fine object in the southern landscape. Its many ridges spread grandly down to the plain, and all its lower slopes are rounded with ancient *débris*, and lack the nakedness of the mountains of Baltistan. The soft modelling of these lower slopes, and of the similar skirts of other mountains around, gave a finish and grace to the view of a kind common in most mountain regions, but the like of which we had not seen for many months. Moreover all the slopes had the appearance of being covered with at least a thin garment of vegetation, and there was a carpet of scanty grass on the rolling moorland traversed by the path. Every blade was burnt brown or yellow by the summer heats; but to our unaccustomed eyes the effect was nevertheless luxurious. We seemed to have left the desert valleys behind, and to have arrived in a land of plenty—an impression exactly the contrary to that usually received by travellers, who come hither for the most part from Kashmir. The light lay broad upon the ground;

there was a fine low mountain outline ahead ; the road was excellent, and the ponies and saddles fair. We trotted along in admirable spirits, delighting in life. We seemed to be starting on a journey instead of approaching its close. All Asia lay before us. The people we met had, some of them, come from that Yarkand of which we were always hearing so much. We were at all events on the road to it. The highway of Central Asia was under our feet.

As we advanced, the snow-mountains seen from Oldingtang came for a time into view to the south. We regarded them with but a languid interest. They are western outliers of the Nun Kun peaks, in the neighbourhood of the Bhut Kol pass. After a pleasant ride over the open, there was a descent from the plateau to the banks of the Wakkha, where the river has worn a large basin, now filled with the fertile fields of Tarumsa. The winding stream, as we looked down upon it, was like a ribbon of sunlight passing amongst the shaded fields. On the outskirts of the village were a group of graves. Over each was carefully built the miniature semblance of a house, with door, windows, and hole in the corniced roof. Similar graves were on the outskirts of all the other villages passed during the day. They reminded me of ancient tombs in Cilicia and Lycia.

A short gorge separates Tarumsa from Paskiyun, which occupies a similar open basin amongst the low alluvial hills. The stream is a babbling brook of clear water, rushing over shallows and amongst great boulders of hard rock, which may have been transported by ancient glaciers, but can equally well have been washed out of the alluvium into which they may have fallen from cliffs now worn further back. Traces of glacier action we did not see. If any exist they are buried out of sight by vast recent formations. All along the banks of the stream there was more or less of wild vegetation, and, as the contour of the valley lends itself to canal-making, the artificially irrigated areas closely follow one another. We had seen no valley com-

parable to this for natural fertility since crossing the Himalayas from Gurais. A second and larger caravan passed by, and presently, at noon, we came to the village of Lōsun. We found a charming little *bagh* by the side of the stream, and determined to halt and lunch in its shade. The pack-beasts kept our hunger waiting for an hour.

When we started off again, at twenty minutes to two, the sky was clouded over. A long gorge had to be traversed, whose barrenness was diversified by frequent patches of green and many willows, with leaves turning into gold, growing by the water's edge. The road was everywhere admirable. An hour and a half of quick travelling brought us to a dāk wala's hut, in front of which was a *mani*, a wall-sided, oblong mound, on the top of which were strewn many stones inscribed with the universal Buddhist formula, *Om mani padmi hum*. The traveller who passes by these, leaving them on his right hand, gets the benefit of the whole lot of engraved prayers. This was the first clear evidence I perceived of our arrival at the Buddhist land.*

* It is more accurate to speak of the religion of Tibet as Lamaism than Buddhism. About Lamaism we are only just beginning to know something. The following letter from Dr. Waddell is quoted from the *Academy* of January 13, 1894:—

“My researches on Lāmaism, conducted among Lāmas of Central Tibet, present many of the leading features of that religion in a new light.

“No one seems to have realised that Lāmaism is essentially a demonolatry, and only covered imperfectly with a thin varnish of Buddhist symbolism, through which its monstrous nature everywhere reveals itself. Even the purest of all the Lāmaist sects, the Gelug-pa, are thorough-paced devil-worshippers, and value Buddhism (the Mahāyāna) mainly because it gives them the whip-hand over the host of malignant demons which everywhere vex humanity with disease and disaster, and whose ferocity weighs like a nightmare on all. Even the purest Gelug-pa Lāma, on awaking every morning, and before going outside his room, must first of all assume the spiritual guise of his fearful guardian, the king of the demons named Vājrabhairava or Sambhara. The Lāma, by uttering certain *māntiras*, culled from the legendary sayings of Buddha in the Mahāyāna Tantras, coerces this demon-king into investing the

We forded the river once or twice and reached the end of the gorge.

The opening valley displayed undulating hills ahead, one of which consisted of an extraordinary series of coloured rocks—bright yellow, red, purple, green, and blue. The disintegration of these striped the hillside with the like gay colouring, and where the *débris* of different sorts mingled together all manner of intermediate tones were produced. Opposite this Joseph's coat of a hill opens the short Mulbekh valley, and in the mouth of it are the fields and jungles of Shargol. On rounding the corner and approaching the village we were struck by the gaily-painted *chortens** above the cluster of houses. On coming near them we noticed grinning, straddled human figures in coloured relief on their lower storeys, and yellow prancing animals above. The tops were all whitewashed—gaudy and ugly erections, but in form not bad. In the face of a precipice above the town were the windows and painted brick façade of a small rock-cut *gonpa*.† In other respects the village was like those previously passed, though the houses were better built than in Baltistan.

It was a quarter to four when we reached the *serai*, a mud-built collection of chambers about a courtyard. Along one side is a veranda facing outwards, with a series of rooms opening off it. We were once more in the lighter

Lāma's person with his own dreadful guise. Thus, when the Lāma emerges from his room in the morning, and wherever he travels during the day, he presents spiritually the appearance of the demon-king. And the smaller demons, his would-be assailants, ever on the outlook to harm humanity, are deluded into the belief that the Lāma is indeed their own vindictive king, from whose dread presence they flee, and leave the Lāma unharmed. The bulk of the Lāmaist cults comprise much deep-rooted demon-worship and dark sorcery."

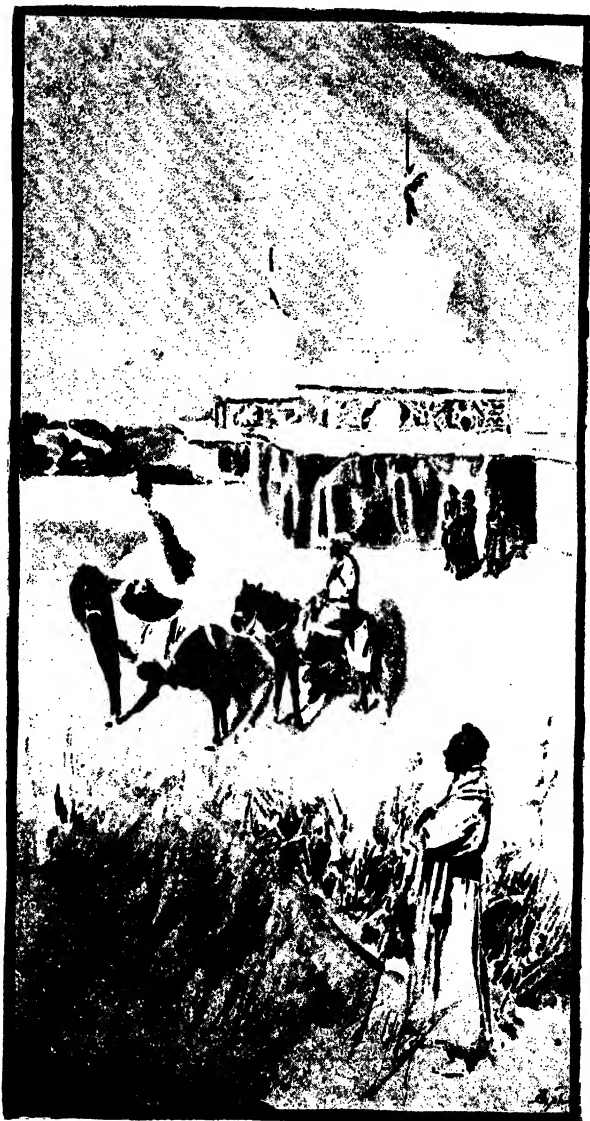
* The proper spelling is *Mchodrten*. Ladak should be spelt *Ladwags*, and Leh *Slel*. I may also mention that Kinchinjanga should be written *Katzodchonga*, and means the Five Great Storehouses of Snow. I owe these facts to Dr. Weber, of the Moravian Mission at Leh.

† A *gonpa* or *lamasery* is a Buddhist monastery, the abode of one or more lamas.

and cooler air of the higher altitudes, and *Edelweiss* growing about the tent platform welcomed us back. The height of Shargol is 10,600 feet. In the evening Captain Myers came in to camp and brought very welcome news. We sat up talking till ten o'clock, and he left me a supply of papers and the new Badminton volume on "Mountaineering." He was hastening to Kashmir at the rate of two marches a day—hard work with only the local ponies.

September 21st.—Bidding good-bye to Myers, who went off a little before us, we left the *serai* at half-past seven.

We crossed the little brook and returned down its right bank into the Wakkha valley again. The morning was dull, the sky being completely overcast. Our way lay in



CHORTENS AT SHARGOL.

the open gently inclined valley near the edge of some low jungle that borders the river. Beds of recent conglomerate jut out at the foot of the hills on either side. The slopes on the right bank are undulating; but on the left fine crags stand up against the sky. Many of the rocks are brilliantly coloured, blue or red, and their *débris* preserve the same tints and manifest them afar. This remarkable colouring may be described as characteristic of all the region between Kargil and Leh. We had not gone far before we descried, upon our left, a *gonpa* perched on the summit of a steep rock. Such positions are constantly occupied in this manner, and the reason must be sought in superstition, tradition, or mere æsthetic preference, as much as in a desire for safety from attack.

On coming nearer the foot of the rocky prominence, we were struck by the number of *chortens* ranged along its base near the roadside. All are built on the same model, but most are in an advanced state of decay. In the base of one I found fragments of broken pottery and two or three model *chortens* in hard clay. The ashes of the dead are mixed with the clay in them. I brought some of these home, and they are now in the British Museum.

A little further on we noticed a natural tower of rock, standing out at the foot of the hill. The road goes between it and the slope. There were rags on the top fluttering from sticks, and looking for all the world like clothed human beings. As we came nearer I saw that there was a colossal figure of Chamba,* carved in high relief on the roadward face of the rock, and I soon recognised it as the famous figure which has been so frequently and divergently depicted in books of travel. It is a feeble work of art, and, from the condition of its surface, I should not judge it to be very old. The lower part of the legs and feet are hidden by a little temple built beneath it. I entered this shabby shrine and found that the feet were badly carved, the right being turned out and toeless, the

* Chamba is the Sanscrit Maitreya, the coming Buddha.

left pointing straight forward. There are also five or six little figures in low relief near or between the feet, but they are so rough that it is difficult to discover any identifying features about them. The figure, or rock, or place, is called Mulbei Chamba. Zurbriggen busied himself in trying to find a practicable route to the top of the rock, but could not succeed. In the neighbourhood there are many ruined houses, and the place has evidently possessed attractions for religious people through a series of years, but now seems to be less prosperous:

After about two hours' slow riding we turned to the left, and quitted the Wakkha valley for the short side branch that leads at first north and then east to the Namika La. It is a barren glen, for all the world like some Arabian or North African wady. Its sides are rounded slopes and ribs of sandy *débris*, and its bottom is occupied by the dry bed of an intermittent torrent. The ground was hard baked and smooth. As we entered, the sun shone on the sandy slopes, but a dark purple pall lay over some rugged rocks behind, producing a noticeable effect. I separated from my companions, and the windings of the narrowing valley soon isolated me from the world of men. Desert to right and left, desert above and below. A little lizard hurrying across the faintly marked track was the only living thing in sight. A jackal's bark came faintly to me from some hidden corner. Ahead a remarkable tower or blade of rock stood up out of the rounded slopes against the sky. There was a stone-man on its top. The valley now narrowed below into a mere trench between the slopes, and went winding up towards this rock, which, as a matter of fact, stands immediately over the pass (south of it), and forms an admirable landmark. My pony climbed on with his monotonous and slow pace; the scenery was always the same. The time seemed long. At last the path doubled back, and the view rapidly developed. I saw the crested ridges, that look down on our previous day's march, ranged against the sky and enriched with such a depth of

purple colour as I shall probably never again behold. A few steps more and at twenty minutes to twelve I was on the Namika pass (13,000 feet) and an almost exactly similar, though somewhat wider, view to the eastward spread itself before me. The others soon came up.

There were rounded *débris* ridges in front and purple crests behind, with a sprinkling of fresh snow on a few of the more distant and lofty heights. A cold wind that was blowing did not invite us to linger, so, after a quarter of an hour, we started on our downward coturse. We descended in the most dilatory fashion, looking out for water and a place for lunch. The man with us would not allow that either the first or the second supplies of water met with was good, but the third he approved, and by it we settled down to await the coming of the baggage. After lunch we descended the rest of the very tame valley to its junction with the Kharbu. At the angle we were interested by the glimpse down stream to the north, where the distant mountain crests were picturesque, and still more so the jagged rocks boldly grouped in the gorge below. We turned our backs on this view and proceeded up a wide valley, with here and there some ragged crest of ancient rock jutting forth out of the rounded *débris* slopes of its sides. Plenty of green vegetation was in sight, chiefly along the river banks; ahead there were the peaks powdered with snow that greeted us from the col. A dark storm swept finely over them, and for a while blotted them out.

The march was long, and grew to be tedious. Harkbir created a momentary diversion by falling off a pony he was riding at full gallop. He explained that that was part of the fun. As we approached the village of Kharbu, a calf and a goat joined themselves to our company, and refused to be frightened away. At last the dirty *serai* (11,990 feet) came in sight. The village is situated at the foot of a much broken hill, faced with many precipices. It also has been a sacred place, for there are ruined *gonpas* on all its most lofty and inaccessible protuberances. Another

gonpa, ruined too, is on a similar but smaller rock peak a little lower down on the opposite side of the valley. The neighbourhood seems to have been very pious. There are plenty of *chortens*, one new and well built; the series of *mani* heaps is endless, and they are being increased both in number and length. The baggage arrived almost as soon as we did. At four o'clock we were able to pitch our tents on the inhospitably exposed platform before the *serai*. The days of our picturesque camps seemed to be ended. There was no longer any choice; a gaunt and well-used level camping-ground, without grass or, usually, trees, awaited us at the close of every march.

September 22nd.—The morning was disagreeably raw and the sky thickly covered with clouds. When we started at seven o'clock we were all blowing on our fingers to keep them alive. Our feet soon chilled down to the same discomfort, so that the first hour or so of the ride was far from agreeable. The scenery continued in all respects similar to what we had passed through on the previous day. Here and there was a bold precipice, a fine bit of rock grouping, or a sharp serrated crest jutting forth from the rounded *débris* ridges or slopes, which occupied the major portion of the landscape, and as the day advanced were sometimes prettily dappled over with sunlight and cloud-shadows. Flocks of sheep and goats were numerous and large; they were being led forth to pasture on the wide stretches of scant herbage which are to be found in the dells and along the foot of the hills. The existence of these flocks is enough to prove that, however barren travellers from Kashmir may think this district, it is by no means desert, in the sense that the Indus valley is desert. A traveller's impressions depend almost as much upon the country he has come from as upon that through which his journey lies.

After going slowly for two hours we passed the mouth of a side valley leading up towards the north. Here the village of Hinaskut attracted attention for a moment by the boldness of its situation on the summit of a rock in

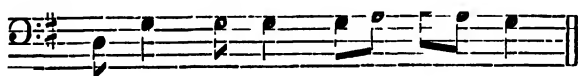
the jaws of the bare ravine. The ascent towards the Fotu La may be said to have commenced hereabouts. It was gradual and rather dull, leading always amongst undulating *débris* slopes and by a dry water channel. There were some fine rocks ahead (a mass that looks down upon the pass), and near them opened to the southward a narrow and striking gorge. Its sides are broken up by many bladelike ribs of steep rock, over which the sunlight was kind enough to play for our delectation. Behind them is a snow-clad mountain called the Kangi Station; its proximity was agreeable to us, though it is in all respects a third-rate peak. After ascending a few easy slopes and passing over a bend of the hill the pass came in sight. It looked deceptively far away, after the manner of hills and other objects in these regions, all of which our eyes, accustomed of late to such vastness of scale, estimated at about double their true size. By twenty minutes past eleven we were standing on the Fotu pass by the side of the *chorten* that picturesquely marks the highest point (13,450 feet).

The views in both directions were similar, and both were fine, though not specially extensive. On each side a bare undulating valley, of an ochreous colour, led away to a distance of purple hills. Eastwards there was a low snowy peak or two to be seen, but the forms of the crests against the western horizon were finer. After a halt of half an hour we continued our journey, and presently came to a tiny rill, apparently insufficient in volume to be used directly for irrigating purposes. The ingenious natives therefore built a small pond for it, and the supply, thus stored up, can be flushed over the neighbouring cultivated patch at the needful hours and seasons. This was the first instance of water storage we saw in Kashmir. We halted for lunch by the brook, and were delighted to find some springy turf close at hand for our *al fresco* couch. From the meadow the way led down the bare valley and then along its alluvial gorge, between notable walls of earth-pyramids. It was a monotonous ride with little to attract the eye.



LAMA-YURU.

On turning a corner, in no way different from so many that had preceded it, strange Lama-yurn burst upon us with a suddenness that was startling. We dismounted beside a *chorten* and *mani* mound to survey the novel scene. The valley sides were steeper, but as barren as before; the fields in the basin below were already despoiled of their harvest and prepared for the winter, so that there was almost nothing green about them. Beyond the basin, in the valley's hollow, rose the extraordinary town on the top of a conglomerate plateau, whose precipitous face was seamed by gullies and, where the upper surface was not protected, cut into earth-pyramids. For a moment I was reminded of Assisi, I know not why. There was, perhaps, something about the grooved precipice semblant of the buttressed substructure of the Church of St. Francis, and the bare hills hereabouts are not unlike those of the stony country that Francis loved. For background, to set off the *gonpa* on the hill, were the same fine mountains we beheld from the pass, but now swept over by purple rain-besoms that had a solemn look amongst the purple crags. A light yellow sand deposit against the grey hill on one side, and a blood-red stain of rock and its *débris* on the other, were by their unexpectedness well in keeping with the general peculiarity of the scene. What added to the effectiveness and sentiment of the view was the obviously sacred character of the place. *Chortens* in great number, ranged in lines, one row behind another, and long *mani* mounds were to be seen on every side. There were few people in the fields, but just below me a man was driving cattle round and round a threshing-floor, and as he drove he kept singing aloud:—



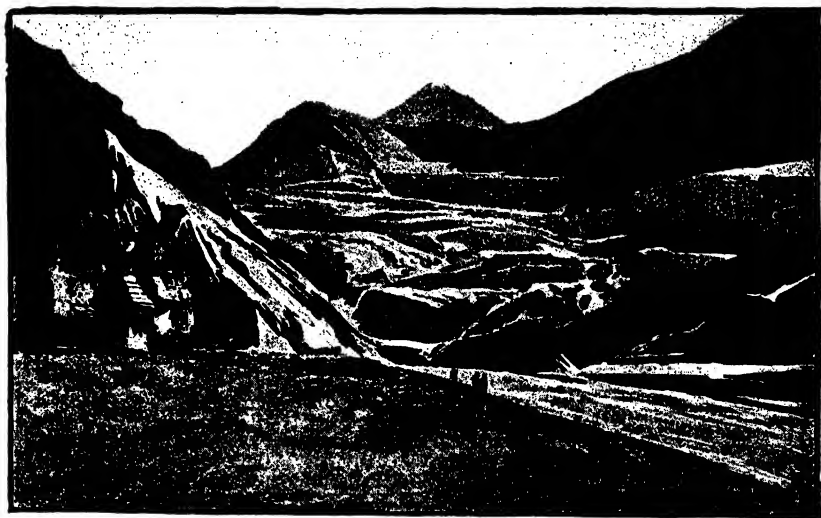
The notes came from his chest, and were carried afar over the land. It was pleasant to hear such sounds and intervals once more, for one gets tired of the nasal whining

of the Moslem folk. I halted to survey the scene, and then slowly wended my way amongst many *chortens* down to the camping-ground (11,760 feet). The tents were pitched and the people were assembled in some numbers, regarding them with interest. A friendly enough folk I found them, though uninteresting; but the coloured caps of some and the bright skirts of a few of the women enlivened the grey fields, and for that I was thankful.

After we were settled in camp, and the wind had begun to blow and the rain to pour, a man came down from the village with a small four-stringed instrument with a bladder belly. He played it with a sort of fiddle bow, and sang to it, while his small boy danced. On the head of the instrument was fixed a little popinjay, once gay, but now gone to tatters; his wings, head, and tail worked with a string after the manner of the toy birds sold for a penny in London streets. The man held the string with his bow hand and made the puppet wobble to his music. His song was the constant iteration of a brief refrain to which he fitted many words. The performance was much appreciated by a crowd that gathered round. The evening was gloriously fine and the sunset magnificent. A roof of golden cloud spread over our heads, and the clearest blue sky imaginable intervened between it and the rock ridge, crested with needle points, that closed in the horizon.

September 23rd.—The fine night was followed by a fine morning. As we left the village at eight o'clock I noticed inscriptions, doubtless purely religious, on several rocks by the wayside. The whole Lama-yuru valley was at one time filled deep with mud-avalanche deposits of sand and water-rolled pebbles of all sizes. It was not a lake-basin, for the valley below the open area shows the same formation, reaching up to the same altitude, and it is likewise found in the Indus valley where the side valley joins it. The fact seems to have been that all the valleys of this region were at one time in the condition exemplified by the Pamirs, filled to a depth of from one

to two thousand feet with mud-avalanche *débris*. In the present geological period this deposit has been largely washed out again, but the depth of the existing valleys is not much below that of the old ones in which the deposit was laid. The recent deposits are now in the form of conglomerates and sandstones. Some of the lowest conglomerates are extremely hard, and patches of them, different in colour from the bulk, look as though they might be fragments of some yet earlier stage of this filling and washing out operation. A short distance below Lama-yuru



LOOKING DOWN THE VALLEY FROM LAMA-YURU.

the hillside to the south-east is covered with the ruins of the alluvium. They are cut up and rounded off by a maze of little valleys absolutely bare of all trace of vegetation, and of a uniform yellow colour, presenting the most extraordinary aspect. The formation looks like a quantity of honey or other thick fluid, arrested whilst slowly crawling down the slope.

After passing through the fields of Lama-yuru and pausing to take a last look at the striking scene, we entered a gorge cut in the alluvium and came to where the underlying rock was exposed and the stream flowing in a bed of

it. Lumps of the alluvium, converted into wonderful earth-pyramids, hung here and there upon the slopes, and a solitary pillar stood close by the path—a landmark that none can fail to notice. The gorge presented many fine points of view, and looked specially well with its trough in

shadow and the morning sunlight grazing the edges of the many-ribbed slopes and cliffs that shut it in.

The Lama-yuru valley is only a branch of the considerable Tarchik group of valleys that drain the snowy mountain ridge dividing them on the south from Zaskar. After about an hour's march we reached the junction of our little brook with this more considerable stream, which also is small,



GORGE BELOW LAMA-YURU.

considering the area and elevation of the region it drains. The mountains on either hand became bigger, but at the same time the valley bottom was broader. Yet a little lower down and the sides turned into slopes of *débris* and lost the grand character of the gorge we had come through.

At the little plantation of Hangru another small side valley enters from the south-east. We reached it in about two hours from Lama-yuru, and, as there was a shady rock near the roadside and the dāk wala's hut, we made a short halt beneath it. The dāk wala brought an offering of ripe apples in a graceful, spoon-shaped wicker basket. At



LOOKING UP THE INDUS FROM THE CORNER.

every village hereabouts they offered apples, and sometimes most excellent they were, large, of a fine red colour, and deliciously sweet. The descent of the remainder of the valley took less than half an hour and was without incident. Shortly before noon we were by the banks of the Indus once more. The angle of the road is marked by a

chorten and a *lato*, the latter being a sort of square box or tiny chamber, with a hole opening into it. Harkbir investigated its contents, and found a broken stone with a painted and engraved Buddha upon it. The Indus was narrower than where we left it, and in colour green like the sea.

We turned up the left bank and passed over a flat and stony desert to where the way dipped down to the wooden, Indus bridge. This spans a narrow gorge. On the far side it is protected by a picturesque fort, in which a few guards reside. They turned out to meet us and lead our horses over. There are many inscriptions on stones near the bridge, besides outline representations of *chortens*, in some cases rather elaborately wrought and of considerable size. Some of the inscriptions are clearly old, the great stones having since been broken or built into the walls of the fort, but none of them are at all comparable for antiquity of appearance (manifested in the difference between the colour of the rock surface cut and uncut) with the ibex figures we saw the first march from Skardo. Half an hour beyond the bridge we came to the village of Khalsi and halted for lunch. Rahim Ali served it with a promptitude which reminded Zurbriggen of a cook he heard about in Vevey, who takes a live chicken and in five minutes produces it duly plucked and cooked!

When we proceeded upon our upward way the valley displayed itself before us in great beauty. It is a barren desert, as below the Dras, but opener and adorned with the finely coloured rocks we saw so much of during the previous days. A broad, lake-like reach of the green river swept slowly round to a rapid, deep below our feet. *Débris* slopes of green rock, here and there striped with blue, led up beyond to fine mountains, purple and red, and the blue sky above them was flecked with white clouds. For the remaining two hours and a quarter of our day's ride we traversed *débris* slopes, passing no villages or other cultivation, and no green patches, but many long *mani* mounds,

and meeting several small caravans bringing down the produce of Yarkand from Leh. At 3.30 we reached Nurla, and were delighted to find that some new rooms in the *serai* (9,520 feet) were fit for habitation. We accordingly settled down in them for the night, our luggage arriving almost as soon as we did. The unwonted comforts of a roof over my head, a bed to lie upon, and a warm night, were too much for me, and I could not sleep.

September 24th.—We started away at 7.15 in the cool and cloudy morning. The scenery remained at first like that of the previous day, the *débris* slopes being relieved by boldly jutting crags. After an hour's ride or more we came to a ridge of rock that divides the present from the ancient river bed. The road follows the latter, and the water soon passes out of sight. We traversed a valley with a bottom of sand and walls of bare rock, absolutely desert, but very impressive. Here we met Yarkand caravans, which became daily more numerous, and some stray travellers of noticeable aspect. First there was a well-to-do merchant, riding alone, a writing-box stuck in his girdle being his only visible luggage. Presently an aged Asiatic came along, tottering on thin legs and slippered feet. His face was haggard, and he looked like an ascetic. The journey was long for him, poor man; he seemed as though to totter a hundred yards were day's work enough. But on he went, patiently, towards Mecca perhaps, but visibly towards eternity. He was followed by a stouter fellow, clothed in rags, and apparently in a hurry. He had recently been washing his face in sand, and his cheeks were thickly powdered with it. He came and was gone like a vision of the night.

In descending to the riverside again we met a drove of laden donkeys on the zigzags, and had some difficulty in forcing our way through their vagrant mass. On the opposite bank of the Indus the hills hereabouts are stratified with regularity, the strata being tilted up almost vertically and striking parallel to the river. The weathered edges of

the strata stand out like knives from the hillside. Now and again we caught a glimpse of some distant mountain, and its utter blueness always came upon us with a fresh surprise. Such colour is scarcely to be looked for out of the Hebrides. After a rather shorter march than usual we turned a corner and came in sight of Saspul, where the *parao* ends. A new sort of scenery opened before us. The valley bent away to the right, and in its stead arose a series of low, nubbly ridges, one behind another, and of all colours—green, brown, ruddy, and blue. The river made a fine sweep at our feet and narrowed to a gorge spanned by a new wooden bridge. We entered the basin of Saspul through natural rocky gates which the Indus has with difficulty formed.

Saspul was clearly at one time an important place and religious centre. The approaches to it are adorned with a more than ordinary number of *chortens* and *mani* heaps. There are the ruins of an older village, with one large building, on the top of the high alluvial plateau, which hereabouts attains a great development and is really a series of mud-avalanche fans. A *gonpa*, apparently modern, stands near the roadside. Its sloping walls and heavy cornice give it something of the look of an Egyptian pylon. The harvest had been reaped from the wide expanse of fields, and only some threshing remained in hand to be done. A multitude of beasts of burden, donkeys, ponies, and a few yaks, were grazing all over the ground, whilst their loads were lying together in heaps, and the drivers sat around them eating their mid-day meal. They belonged to caravans coming from Leh. On entering the desert, beyond the fields, we passed a large group of *chortens*, one of which was raised on two piers and so formed into a gateway over the path.

We stopped for an hour to lunch, close by a couple of carefully built ponds, in which the waters of a small brook are stored. The road here again leaves the Indus and turns up a side valley to the north-east. It passes a quantity of *chortens* and comes to a stony place where

there is a perfect battalion of stone-men and many engraved and inscribed rocks. After following the side stream for a mile I found myself absolutely alone, the others having gone ahead or lagged behind. Turning eastwards I was soon out of sight of any trace whatever (except the foot-track) of the activity of man. The valley became narrower and wound steeply upwards. A gusty wind was blowing over the bare earth, overhead was a lowering sky, through chinks in which a ghastly sunshine now and again blanched the landscape. At every step the scene became wilder. The path wound amongst huge lumps of rock sticking out of disintegrating slopes. Its turns were so frequent that one could not see more than fifty yards ahead or behind. It was like being shut into some Syracusan quarry. At length the walls receded on either hand, and a short, broad slope led to the col, which I reached in about one hour from the luncheon place. A wide and striking view opened before me, over undulating foregrounds and away to distant peaks unfortunately veiled in clouds.

Ten minutes further on I topped another col where the *dák walas* have a hut. They came out to greet me and offered apples, which seemed the most deliciously flavoured I ever ate. Zurbriggen now joined me, and we set off as fast as our ponies would carry us over the wide undulating region of stony mud-avalanche fan that lay so broad before us. There was a sense of freedom in the unwonted spaciousness of our surroundings. On our left were ranges of the more desolate hills, remarkable for the rich colouring of their rocks, and the scarred crests and faces that sun and frost have made for them. To our right was a low ridge against which the foot of the fans abutted, and, beyond and above it, the hills on the further side of the Indus valley.

We trotted for a long distance up and down the undulating desert, and so came to the edge of the plateau where it dips to the Bago Drokpo. The dip came upon

us suddenly and revealed the peculiar village of Bazgo. We caught sight of it through a gap with purple and green *débris* slopes for sides. The houses are planted, some on a cliff of purple *débris* and some at the cliff's foot amongst green trees. They are built of crude brick made of the purple and grey mud. There is a bluish *débris* slope behind with ruddy rocks above it. A purplish grey sky roofed in the



STAGED CHORTEN AT BAZGO.

whole. It was a striking view. We descended steep zig-zags to the village. At the foot of them is an ancient group of *chortens*, one of which stands on a threefold staged base like a Chaldean *zigguratt*, with staircases at the four sides leading into its hemispherical and now ruined dome. As McCormick was not well we decided to halt in the village, where there is a decent *serai* (11,050 feet).

It was satisfactory to have accomplished something more than a march and a half before 4.30 p.m.

September 25th.—This day's march was entirely delightful. The night was cold; snow fell low down, and a few drops of rain pattered on the tent roofs, so that when we started at 7.15 a.m. the air was cool under the overcast sky. On leaving the village we passed numerous aged *chortens*, one staged, but gone to ruin. It was built of stone, and, like many others in this dry land, may well have been ancient. We descended the fertile side valley to the broad bare stony mud-avalanche slope, which inclines gently from the hills to the hidden Indus. Elaborately built *mani* mounds stretched their interminable length alongside the road in endless succession. The ends of the most important were emphasised by large *chortens*. In about an hour we reached the village of Nimo, the end of the *parao* begun by us on the previous afternoon. The fields were busy with people threshing out the corn and singing to their beasts various varieties of this refrain :—



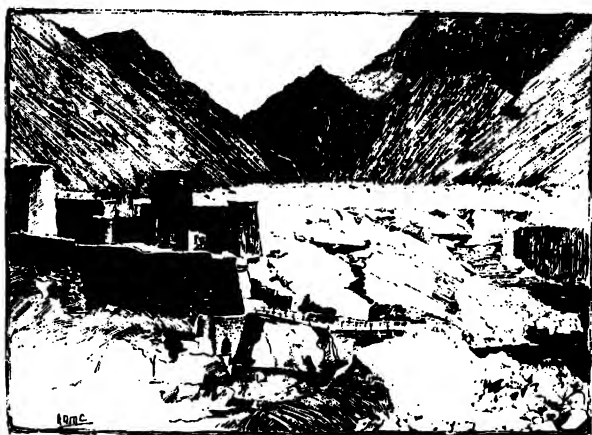
We made swift progress and left mile after mile of the wild exhilarating country behind. From the rounded back of the highest undulation the upper Indus valley opened before us, stretching away to mountain regions unknown to us even by name. The Leh valley took distincter form as we approached, and we saw that it was characterised by long and desert mud-avalanche fans sweeping down with gentle slope their three or four miles from the foot of the rocky southern ridge to the green banks of the river. The line of these fans led the eye up to bold mountain crests, and these to the clouds that buried their summits, and the clouds themselves were whirled by the wind into upward sweeping spirals to the very zenith.

The way drew us steadily downwards over a gentle slope. We put our ponies to their best pace and devoured the ground. Shortly after eleven o'clock we dipped into a nala where water flows, and there found the *serai* of Fiang pleasantly situated amongst autumn-gilded trees. We halted for lunch and had long to wait before the laden ponies arrived. At one o'clock we were off again, making the best pace possible to Spittak, where the hills and the river come together. We passed round the corner, and, to our surprise and delight, found a considerable area of short turf, nourished by the river's floods.

Beyond it the desert began again, as we bore away from the river. We passed through a sandy gap amongst rocks and over a slight rise at the edge of the vast fan, some five miles deep, a little portion of which, far up towards the hills, is green with the fields of Leh. The town itself was visible in the far distance with its rock-perched castles. A long straight track across the sands and stones lay towards it. We urged our tired ponies onwards; the trees came nearer and the houses grew more distinct. Laden yaks, donkeys, and ponies, with their peculiar drivers, which were black specks in the distance, assumed individual form and then were passed and left behind. At last we reached the precincts of the place, and entered under a gateway into the

long bazaar, which was full of busy merchants. At the far end of it a tangle of streets had to be threaded and a field or two crossed before the clean dâk bangla received us into its commodious compound, one hour and a half from the luncheon place.

Whilst awaiting the coming of the baggage I called on the Joint Commissioner, Captain Cubitt, and afterwards on the kindly Moravian missionary, Dr. Weber, and his wife, whose German was music in Zurbriggen's ears. Thus the afternoon passed quickly by, and in the evening we dined at the Residency and experienced the comforts of table and chair.



INDUS BRIDGE AT KHALSI.



LEH BAZAAR.

CHAPTER XXVIII.

LEH AND HIMIS.

LADAK is a portion of the upper Indus valley, some one hundred miles in length, inhabited by Buddhists of Tibetan race, called Ladakis. Leh (11,500 feet) is its capital. Ladak geographically and ethnographically belongs to Tibet, but politically it forms part of the kingdom of Kashmir. It was conquered by Golab Singh's army, and the history of the invasion is told in Cunningham's book on the country.* Previously it was practically independent, but acknowledged some sort of shadowy spiritual and temporal connection with Tibet. Ladak has been frequently visited and described by

* See also Drew's "Jummoo and Kashmir."

travellers, and its people have been carefully studied, not by travellers only, but by Europeans residing amongst them either in official capacities or as missionaries. There is no occasion, therefore, to set down in this place the crude observations of a flying visitor.

My object in going to Leh was to compare our barometer with the standard instrument in the meteorological observatory there. The determination of the altitudes of the various points reached by us during our journey depends on a comparison of the readings of our barometer with simultaneous readings of the barometers at Gilgit and at Leh. I had compared our barometer with that at Gilgit; it was advisable also to compare it with the Leh instrument. Accordingly the morning after our arrival (September 26th) I paid an early visit to Dr. Weber, the head of the Moravian mission, which, amongst other useful work, concerns itself with the supervision of the Government Meteorological Observatory and the Post Office.

Dr. Weber took me to the observatory at the earliest possible moment. My barometer was set up beside the standard, and the two proved to be in agreement. The object of our long ride from Skardo was thus accomplished in a few moments. It only remained for me to copy the records of the readings of the barometer and thermometer taken at Leh during the months of our journey, and, that done, we were free to turn our faces homewards.

We were unwilling to leave Ladak without availing ourselves of the opportunity of seeing what was possible of a country so interesting and so strange. The importance of Leh consists not so much in the fact that it is the capital of Ladak as that it is the principal station on the Central Asian highway from India to Yarkand and Kashgar by the Karakoram pass. The trade that comes along this difficult route, over passes 18,000 feet above sea-level, is not so extensive as formerly, but is still considerable. When the caravans arrive in spring and autumn the town assumes a busy aspect, and its bazaar is crowded with a remarkable assemblage of

persons of every Asiatic race. At the time of our visit the assemblage was less numerous than it had been a week or two before, but there were still plenty of merchants and much merchandise. The bazaar was filled with an animated



THE YARKAND SERAI AT LEH.

thröng of men and animals wonderfully picturesque to observe.

I took an early opportunity of visiting the *serai* where the Yarkandi merchants are accommodated. It consists of a two-storeyed building arranged around an irregular square. Bales of goods are piled about the open space, and the men in charge of them live in the surrounding chambers.

The goods often change hands here, one set of merchants bringing them from Kashgar, Khotan, Yarkand, and other places, and another set carrying them down to India and disposing of them in the bazaars of Srinagar, Lahor, or Amritsar. Bales are therefore opened and goods exposed to view, so that the *serai* looks like a bazaar, and the traveller has opportunities of making purchases. I bought several Khotan carpets and coloured felt Yarkandi *namdahs*, besides certain skins of snow leopards and other animals. The variety for selection was not large. Most of the *namdahs* were plain white. They are imported thus into Kashmir and there dyed and embroidered. The pleasure was in the process of purchasing rather than in the things purchased, for better can be found any day in Srinagar. The picturesqueness of the place and of the crowd that assembles when a bargain is toward, cannot, however, be easily surpassed. Nothing draws out more visibly the character of Asiatics than a bargain, and I could have sat for hours merely watching the play of light on carpets and people, and listening to the Babel of excited tongues.

In order to cash a cheque I called on Diwan Arjan Nath, the Wazir Wazarath of Ladak. The Karakoram pass route is by treaty placed under the joint management of an English and a Kashmiri Commissioner. The Diwan is the Kashmiri Joint-Commissioner as well as the representative of the Maharaja in Ladak. The British Joint Commissioner is also British Resident, and watches the general administration of the country as well as the ordering of the road. I found the Diwan surrounded by a crowd of people—clerks, natives, and hangers-on of all sorts. He is a short, bright, and very polite person, the living image of an old college friend of mine of French extraction. I spent half an hour in conversation with him and returned to our tents laden with rupees.

In the afternoon I drank a bottle of wine with the Moravians, and smoked a pipe with Father Hanlon, of the Jesuit Mission. The Diwan also returned my call, and

we sat together in the *bagh* of the dāk bangla where our tents were pitched under the shade of rustling trees. The sunlight glinted through between the leaves and fell in patches on the gay carpets that were spread about, whilst a ring of white-robed natives stood or sat around at a respectful distance.

Ever since leaving Skardo McCormick had been unwell, and the rapidity of our march did not tend to improve his condition. He seized the opportunity of resting for a day or two and putting himself in the hands of the resident English physician. He spent most of his time in bed, miserably enough, and was unable to enjoy either the hospitalities or the interests of the place; nor could he take part in the expedition to the great Buddhist *gonpa* at Himis which I planned for the next two days, and was enabled, by Cubitt's help, to carry out.

September 27th.—About nine o'clock Zurbriggen and I, with Rahim Ali and Harkbir, rode off from the dāk bangla. The Wazir provided good ponies for us, and arranged for a relay at the half-way halting-place, so we were able to go fast. We trotted through the busy bazaar and left the town quickly behind. The road struck at once into the desert by *manis* of great length. It wound through a few small valleys bordered by striking rocks, the summits of hills deep buried under the alluvial accumulation. The sky was only dappled with high clouds that left all the mountains clear. As we emerged on to the wide long slopes of desert fan that lead unbroken to the Indus bank, a group of snowy peaks to the south, of no great difficulty, attracted our attention and awakened our mountaineering instincts.

We trotted gaily towards the river over the soft sand. My saddle made a noise like Harkbir laughing, so that I seemed to be enveloped in an atmosphere of merriment. In an hour we reached the Indus bridge, and, crossing over it, entered the fertile region of Shushot, which appears to owe its delightful greenness, in part at any rate, to the river's floods. The whole country is, however, here inter-

sected by innumerable little canals, which our ponies kept jumping in their lumbering way. Village succeeded village and farm followed farm; there was no break in the fertile area. The country was full of active peasant life, and many travellers and horsemen were on the road. Now and again a laden yak would come bulging along, then a flock of goats or some horsemen. Mares with their gambolling foals were numerous, and a delightfully playful colt accompanied the aged but active mother whom I rode, a beast of infinite character, obviously acquainted with every step of the way.

The north side of the valley seemed almost wholly bare, but there was the considerable village of Shey stretching its green line along the foot of the hills, whilst a couple of *gonpas* planted on the summits of low rocky crests added to the picturesqueness of the scene. One of them, named Tikzay, was a convent of considerable importance before the Dogra invasion.

At Golab Bagh, opposite Tikzay, after two and a half hours' riding, the relay of ponies was awaiting us. Zurbriggen chose a mild-looking beast and rode off at once. The moment he touched it with the new sensation of a whip it jumped over a high mud wall by the roadside, knocking half of it down in its surprise. A few hundred yards further on we came to a pleasant *bagh* and halted for the baggage ponies to come up with our lunch. The continuing route took us some way further through excellent flat meadows, with the fine bare mountains, many ribbed, many crested, always displaying their rich colouring on every side, and the sunlight dappling their slopes. But the fields ultimately came to an end, and the wide desert was before us once more, with its sand and its stones, and the air dancing over it when the sun shone.

After an hour's going we came again to a little greenness, where a servant of the Himis *gonpa* was waiting, to see that we took the right turn at the division of the roads. We bent southward towards the mouth of a side valley and mounted the steady slope of the fan leading up to it.

At the angle was the first of the usual *mani* mounds (about a quarter of a mile long), which for the rest of the way followed one another in quick succession. Turning the corner we entered the side valley, whose desolation, under

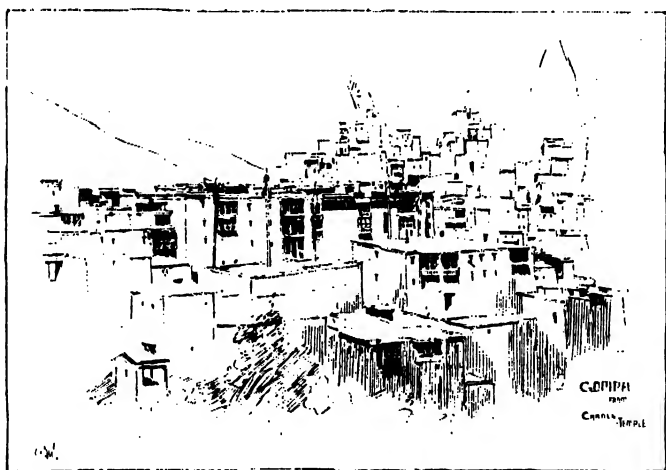


ENTRANCE TO HIMIS.

a heavy roof of cloud, seemed to be emphasised by the plantation of autumn-tinted trees that lined the base of the hills. The slopes were bare of *débris*, and showed all the edges of their tilted strata along their naked sides. On every point against the skyline were poles with prayer

papers fluttering from them. The *chortens* thickened on either side as we advanced; most of them were more elaborate in architectural detail than any we had before seen. We passed under one, supported on piers. Turning a corner the famous *gonpa* was before us.

We were surprised at its good condition, its many balconies, and its general aspect of well-being. It was not unlike a collection of Italian lake hotels. It rather resembled a watering-place of many houses, clustered together on the inequalities of a hillside, than a single building. We rode up its main street, greeted by various



HIMIS.

lamas who were expecting us, and thus we arrived at the spot, where we were invited to dismount. The superintendent of the *gonpa* came forward to greet us, an aged man like Van Eyck's portrait of the "Man with the Pink," at Berlin. He led us to a cleanly swept place under the shade of trees, where a Khotan carpet was spread and two chairs were set up. Dried dates and currants were brought forth, and a bottle of liquor that looked like white wine and tasted like a feeble sort of beer. It was about the colour of glacier water. When our hosts learnt that we had not brought tents they led us into the interior of the place to their

newly built and clean guest-chambers. The Khotan carpets and the chairs were brought up and set out upon a balcony, and presently tea was served, and we were left to ourselves.

We arrived at about four in the afternoon, and sat on the balcony till evening, watching the play of light upon the northern hills, framed between the bare rugged ridges near at hand, and with the convent buildings and neatly kept gardens for foreground. It was hard to believe that we were in a Buddhist Vihara. There seemed nothing strange or unusual in our surroundings. On the contrary, there was a European though not an English feeling about it all. I thought of a night I spent years ago in the great monastery of Gottweih, in Austria, and the memories thus aroused harmonised admirably with the sensations of the moment. Presently, in response to some question of mine, Zurbriggen began to tell me the varied and romantic story of his life, and the interest of that, related in his bold, free style, so caught upon me that I sat listening for an hour or more, fearing lest he should stop. Then dinner and night came together. We fastened a hanging over so much of the unglazed windows as we could, and the hours before sleep were devoted to the usual occupations of changing photographic plates and writing diary.

September 28th.—After breakfast the superintendent came to take us over the place. The morning was bright, and the sunlight made all the painted decoration gay. The kernel of the buildings is a pair of temples side by side, each with a courtyard before its storied porch.* Our rooms communicated with a latticed balcony that faces one of these porches. We first went to the other courtyard where quantities of howling dogs are kept chained up.

Each storey of the porch has two painted wood columns supporting the beam on which the next rises. The walls of this porch are beautifully painted, but the paintings

* For an illustrated account of Himis and the mystery-play, see Knight's "Where Three Empires Meet." See also H. H. Godwin-Austen, in *Bengal Asiatic Society Journal*, 1865, p. 71.

are in a bad condition, and large areas have altogether fallen away. There is nothing about them that appealed to my eyes as other than Chinese. All over the door-wall are seated Buddha-like figures on red lotus flowers, some of exceeding beauty, drawn and coloured quite conventionally, but with great grace of line and an admirable feeling for decorative effect both in arrangement and colour. On the walls to right and left are two great circles held by devils; that to the left, containing a multitude of figure subjects greatly damaged, being the Wheel of Life.* The porch of the other large temple is decorated with the same subjects, but painted at a later date and less good in style. On each of the doors through which we entered the building is a fine gilt bronze boss, of pierced Chinese workmanship, and from each boss hangs a gay tassel of ribbons.

On entering the dimly lit temple† (the chief light came from the door) the first thing that struck me was the multitude of hanging strips of coloured silks and banners. The whole view was confused by them. The interior consists of a central square going up through three storeys to the top of the building. Round this, on all four sides, are low aisles supported on a double row of painted wooden columns. Above the aisles is a gallery, and then a latticed clerestory. Many of the columns are enveloped in hangings and banners. The walls have all been painted, those to left and right entirely with seated figures on lotus flowers, some large, some small, but all drawn and coloured in the same good conventional manner. In the midst of the place opposite the entrance is a large *chorten* with much silver and gilt decoration about it. Its lower front silver panel has quasi-rococo decoration and many inlaid turquoises and other stones. On the left of this is another smaller *chorten*, and there are more yet smaller ones about. Before them

* Described by Dr. Waddell in Journal Bengal Asiatic Soc., vol. lxi. p. 133, &c.

† As to Lamaist temples in general, see Dr. Waddell's "Lamaism in Sikkim" (Calcutta, 1894), being Part II. of the "Sikkim Gazetteer."

are tables of simple offerings—seeds, shells, needles, and an English threepenny-bit.

Ranged in a line with the big *chortens* are many large, gilded wood seated figures of the usual Buddha type, some in shrines, and most with coloured silk shawls wrapped around them. One figure had eyes in the place of *stigmata*; this must have been an image either of Avalokita or Tara. These figures were in many cases good in plastic form and of a fine traditional design, but they are covered with cheap gilding. Some of them, in their coloured clothes, had an extraordinarily realistic effect, and reminded me of the work of Tabacchetti and Enrico at Varallo. Near the *chorten* was a huge dish full of butter with a small ever-burning light in the midst of it. Against the wall behind was a big gilt Buddha of poor quality, and near him were a multitude of manuscripts on a set of shelves made after the fashion of frameworks to carry wine-bottles.

All the wooden architecture—columns, capitals, beams, and cornices—was effectively painted with seated figures wherever there was room for them. In the neighbourhood of the main row of *chortens* and figures were many small objects perched on the tables or any ledge that would accommodate them. One of the small figures, cast in solid bronze, gilt, and finished with the tool, was admirable. The superintendent told me that it was not of Chinese, but Lhasa workmanship. Most of the things—the pots, lamps, basins, and vases—he admitted to be Chinese; some were from Kashmir. I could not get near the little figures in the niches of the *chortens*, but from the distance one of them appeared to be good. The building and the painted decoration of it were, according to the superintendent, made in the reign of Raja Lamba Tsho-kye Dorjé.

On leaving the temple we went round to the back of it and then upstairs to another temple, which likewise had low aisles on either side and across the entering end, the remainder of it being raised a storey higher. There was here a row of large and not very good gilt figures of the

usual sort, and there were many old paintings, mounted on silk like Japanese *kakemonos*, hanging about, most of them representing seated figures in decorative vignettes. One was admirable. Its circular vignette contained a green woman wearing a red halo, doubtless Tara; there were flowers in her hair, and she was sitting in gracefully drawn and voluminous drapery amongst birds and flowers. The same figure was many times repeated in simple outline on the gold ground around the vignette, and the whole was mounted in the usual way on an old piece of silk.

We went out and again upstairs to another temple, whose lofty central portion was surrounded by an aisle on all four sides; above the aisle was a latticed clerestory going half-way round, whilst feebly painted decoration filled



IN HIMIS GONPA.

the wall of the other half. Against one of the walls on the ground-floor was a library of books, each between two red boards, and all neatly arranged in their framework pigeon-holes. The chief contents of this temple were two large silver *chortens*, the principal one being at least eight feet high, not reckoning its wooden base. These *chortens* were decorated with quasi-rococq scroll-work, gilding, and inlaid turquoises. There were fresh-cut flowers in the vases before them.

We were next conducted to a chamber which appears to be of the nature of a chapter-house. It is divided transversely into three parts equal in depth. The first portion is a low sort of porch, whose roof is borne by two pairs of columns; beyond this comes a high central place lit by a clerestory, and with its roof borne by two high and rather elaborately carved and painted columns. Its walls are decorated with rows of little niches, in each of which is a coloured statuette of a seated Buddha. The third division is again low, and its floor is raised above the level of the others, from which it is cut off by a carved and painted screen. The cornice of this screen is decorated with a sort of rough stalactite decoration cut in squares of increasing depth—something between stalactites and the usual Assyrian battlement motive. In the midst of it is a lacquered seat, which they either said was for the incarnation or for some ecclesiastical grandee or inspector who comes from Lhasa.

We were next conducted downstairs into the courtyard before our rooms, and from it into the second of the large, three-storeyed temples.* Its porch is, as I have said, directly copied from that of the other temple. There are two storeys of galleries above the aisles that surround the central high square. The interior is comparatively bare, most of the floor space being given up to long low divans for the lamas to sit on, this presumably being their place of worship or study. There are a good many large seated gilt figures against the wall, and one of them has a very living aspect, reminding me of fifth dynasty Egyptian work, and in particular of the Scribe of the Louvre. The wood-work in this temple was decorated with carved inscriptions painted black on a red ground.

After seeing these things we were re-conducted to our chambers, where I rested a while before going forth to wander in the neighbourhood. Just below our windows is

* This was not properly a temple at all, but the assembly-room or *Dü-khang*.



ENTRANCE TO THE SECOND TEMPLE.

a pretty terraced garden with a pathway up the middle, the whole cultivated in tiny square plots and full of high-stemmed flowers. A stream flows down the valley close below the garden, and its waters are used to turn some prayer-wheels. It babbles over many rocks and is shaded by trees, yellow foliaged at the time of our visit. Large fallen masses of hard conglomerate form picturesque foregrounds, and there are paths set out amongst them, and here and there flat platforms artificially built. On top of the biggest fallen mass of rock a little chapel has been built, which I scrambled up to see. It contained a quantity of good old *kakemonos*. I also wandered a short way up the valley path and passed groups of *chortens*, but notwithstanding the brightness of the day, and the really striking beauty of the hills, I was not in a mood to go far afield.

After an early lunch we were summoned at one o'clock to see the lama dance, which had been arranged for our amusement. The two chairs and the carpets were set out for us on the balcony overlooking the courtyard in which the dance was to be. A lama dance forms part of all the great religious ceremonies, and itself has religious significance for those who understand it, but in this, as in all the flummery of the lamaist religion, it is a mistake to confuse the mere muddiness of complication for symbolic depth. When we were seated, there was nothing before us but the vacant square into which the sun shone brilliantly. A dog strayed into it and was promptly driven forth. Through the open door of the temple opposite, figures flitting to and fro in strange attire were faintly discerned. Some one below us made a remark, but was promptly enjoined to silence. An absolute stillness then reigned for a perceptible interval.

It was broken by the soft and solemn beat of a drum, hidden from our sight. Five costumed dancers descended the temple steps and ranged themselves in a circle round a hole or well in the midst of the square. They wore

hats with broad brims and high fluttering erections rising out of the crown. Their dresses were of the usual Chinese sort, coloured silk petticoats and loose jackets with ample sleeves which they waved about. • They had square aprons of Chinese embroidery, and silk shawls on their shoulders. There were also other silk tags about them of various sorts, which fluttered in the air, and they held fluttering things in their hands. Each wore the



AT HIMIS.

likeness of a skull as a kind of girdle clasp. They danced slowly round and about to the beating of the drums and cymbals, and finally retired one by one into the temple, and silence reigned again.

Presently a kind of droning chant filled the air: it came from the well in the midst of the courtyard and resembled nothing so much as monks scrambling through their afternoon service in the retrochoir of an Italian church on a hot summer's afternoon. It was the signal for the appearance

from the temple of five more dancers, or the former five newly dressed. Their faces were covered with perforated brass masks. In one hand they carried a bell, and in the other a little drum, which was rattled by balls attached to short strings. They ranged themselves about the well-mouth and slowly circled round it, every moment or two at the right point in the chant (in which they, too, took part) they bent forward towards the hole, simultaneously ringing their bells and rattling their drums. When they had slowly made a complete circuit of the well, these dancers also, one by one, retired, and the chant ceased.

The big drums again began to beat, and four men came out of the temple wearing the same clothes as in the first dance; but for headdress a large mask of a devil's head, with the mouth open showing big teeth. These masks were respectively white, red, yellow, and green in colour. They were something like mild Medusa heads of the archaic Greek type, but with a curious dash of Mrs. Grundy thrown in. As they danced, the sun played beautifully upon the fluttering silks and the painted porch behind. There was nothing graceful, but nothing objectionable in their movements, and the quaint masks did not seem in any way peculiar or out of place.

The last *entrée* of this extraordinary ballet again consisted of four dancers with extravagant masks. One wore the likeness of the head of a bull; another, a devil-head with a crown of small skulls; the third, a black devil-head with red, green, and white snakes intertwined for hair and skulls amongst them; the fourth, yet another devil-head surmounted by flags that kept falling out, and a three-tier umbrella above all. This also was a drum and cymbal dance like the first and third, and concluded as before by the dancers retiring one by one into the temple, with an interval between the departure of each.*

* For a full explanation of these and other lamaist dances and ceremonials the reader must await the publication of Dr. Waddell's forthcoming work on "The Buddhism of Tibet."

The superintendent said that the performance was ended. We acknowledged his courtesy by subscribing to the building fund of the *gonpa*, and writing our names on a tremendous sealed parchment that was handed to us by the shabbiest lama we saw, which is saying much. When we retired to our apartment the chairs and carpets followed, and the superintendent came and brought a gift of turnips and potatoes on a dish. This was presently followed by two bottles, one containing what they called *arrak*, a crude sort of spirit, the other *chang*, a kind of beer.

For the remainder of the day we were left to our own devices, but not permitted to wander alone. The moment we set foot over the threshold some one or other attached himself politely to us and never let us out of his sight till we were safe in the guest-chamber again. A beautifully soft sunset closed the day. The long line of mountains to the north was crested with pink, whilst the bare near slopes of straight stratified rock, that framed them, were dyed the softest purple. The cold soon drove us in, and at an early hour we took refuge in our beds from the draughts that rushed across between the unglazed windows at either end of the room and the ill-fitting doors at either side.

September 29th.—There was a hard frost in the night, and all the little streams were thick with ice; the smaller were frozen at their sources and quite dried up. As soon as our breakfast was over, the superintendent came to ask for a *razinama* to say that he had treated us well! I sent him away satisfied. Shortly after eight o'clock we left the buildings and started on foot down the valley, followed by the ponies which were placed at our disposal. I took a number of photographs in the bright morning light before reaching the valley's mouth. Peasants were at work in the fields, and near one group a couple of men were seated on the ground making music with drum and *suranai*. We cantered briskly over the desert by the way we came, and

in less than two hours reached Golab Bagh, where the relay of ponies ought to have been ready. Only one had arrived; we waited half an hour for the rest. They were a weedy lot; mine utterly refused to stir without a comrade ahead of him. We managed, however, to get them along tolerably fast.

Enormous flocks of sparrows were gleaning in the fields, and made the air whirr at our approach. Everything seemed bright and gay around us, and overhead the sky was blue with a clear quality of tone that struck me as unusual. The novelty probably lay in the contrast between the sky and the bright purple-grey mountains shining in the full sunlight. Shortly after noon we found ourselves in the bazaar of Leh, and were surprised to see it



NEAR HIMIS GONPA.

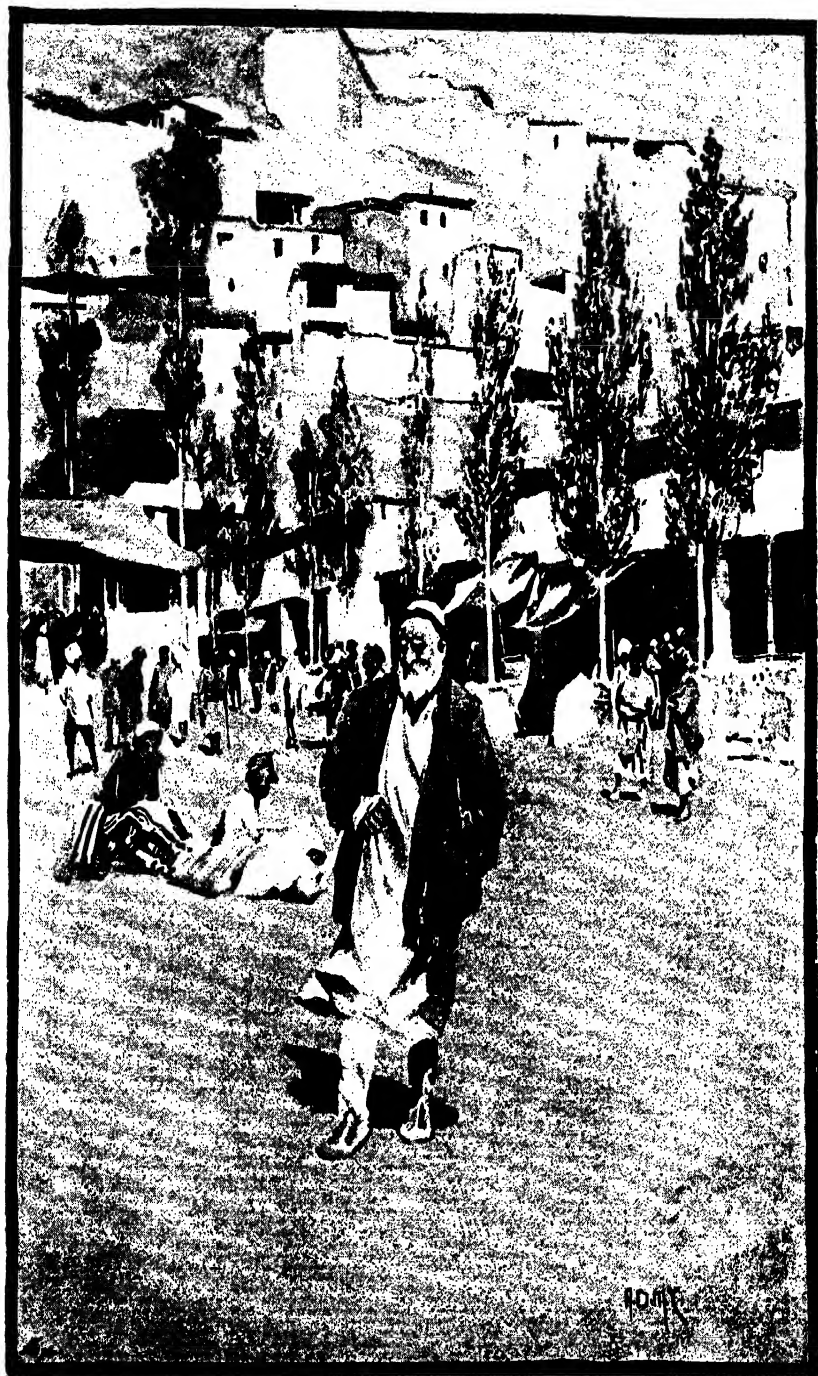
decorated with flags and fitted with goals as if for polo. We learnt that there was to be a *tamasha*, horse and foot races, tug of war, and what not, for prizes given by the Joint Commissioner. McCormick was in camp, still an invalid, but entertaining hopes of ultimate recovery. His servant provided lunch. Zurbriggen and the Gurkhas went off to see the *tamasha*, for which I was unfortunately too late, having many little things to attend to besides

the seduction of fresh newspapers. I afterwards called at the Residency and dined there in the evening with Captain Cubitt.

September 30th.—Leh was so interesting that we allowed ourselves another day's rest there before starting for Kashmir. I spent most of the morning developing photographs in Dr. Jones's dark room, and sending off money to the banias of Skardo. In the afternoon there were public races again, but this time they were held in the open desert between the town and the Indus. Everybody assembled to watch. There was a tent pitched for the Europeans. The natives ranged themselves orderly in rows upon the sand, and all the horses in the place seemed to be assembled for entry in one or other of the events. As I walked down to the course with Cubitt, the air was full of the sounds of gaiety. Drums were being beaten and pipers were piping. Folk were flocking together—merchants, foreigners, and natives from town and bazaar, and peasants from the surrounding villages. The sunlight lay broad and bright upon the shimmering sands, and striped all the hills. The sky was clear blue, and the mountains were absolutely sharp against it, with that soft sharpness which only Segantini has availed to render in art. The very air seemed to be instinct with a crisp effervescent quality, stimulating and invigorating.

The racecourse was straight, throughout almost all its length, and led up the gentle sandy slope of the desert fan—a toilsome way. It was outlined with people at intervals from the starting-post, though the picturesque crowd congregated chiefly round the tent and the goal. The Diwan hurried about in a superiorly animated fashion, as though pleased to be visible and active—a spotlessly clean and cheerful person. The crowd were picturesque, after the fashion of Asiatic assemblages of men, who can always be relied upon to compose as for a picture.

The polo race was the most popular, and had to be run off in several heats. The ponies were a poor lot, and the



LEH BAZAAR.

work was too much for several of them. It was easy for a man to walk the last hundred yards beside the tottering winner. A mile uphill through soft sand is hard work for a grass-fed pony, but the same beast will carry a load at a foot-pace for more than twenty miles over mountain tracks, day after day, without suffering. Regarded as a gymkana, the Leh meeting was not, perhaps, altogether to be counted of the first order, but as a picturesque scene it would be difficult to surpass it. As I stood in the midst at the winning-post and watched the approaching racers, with the extraordinary crowd on either hand, and the course stretching away over the bright desert at my feet, the horses seemed, each one, to be borne upon a puff of golden sand-cloud, floating on the silver lake-surface of a bright mirage. The setting of Buddhist *manis* and *chortens*, elemental crags, and far-off snowy crests, was well in keeping with the romantic nature of the foreground and its inhabitants.



CORNER OF LEH BAZAAR.

I walked back to the town with Mr. F. B. Shawe, the junior Moravian missionary. He told me much about the interest and difficulties of his work, which is chiefly that of a scholar. The Moravians spend their time studying the languages, literature, and folklore of Tibet, and they are gradually piling up a mass of information and learning which will be of high importance, and deserves warm encouragement at the hands of all intelligent persons of whatever religion they may be. At the mission

house Shawe and Weber showed me various manuscripts, figures, and other artistic objects, which they take every opportunity of collecting. Some of their treasures were of the utmost interest and rarity. The pleasant day was brought to an end by a dinner at the hospitable Residency.



WALL-PAINTING AT HIMIS.



ON THE ROAD TO LEH.

CHAPTER XXIX.

LEH TO THE ZOJI LA.

October 1st.—Each stage of a journey, like the successive ideals pursued by a man in life, comes to be regarded as the mere starting-point for the next. From Skardo we looked to Leh as a goal; now we were in haste to quit it, and the hours of the last night of our stay were long. We were once more eager to be on the road; such is the passion for travel that arises in a man! I believe that, with an occasional pause of two or three days, a true traveller could wander for a whole lifetime and not grow weary, till the natural forces began to abate.

Nineteen marches separate Leh from Srinagar. We intended to accomplish these as swiftly as the baggage

could be forced along. Shawe came to see us off, and it was half-past eight when we said good-bye to him, and trotted away through the bazaar. Our ponies displayed various degrees of badness. Before they had gone a mile from the town there were no two of them together. My beast's paces were abominable. His canter was an earthquake. He went more comfortably at a sort of ambling trot, so I kept him at that and forged ahead.

The morning was delightful. There had been a hard frost, and all the little canals were fringed with ice. Never



BAZGO GATE.

were the hills, far and near, more beautiful in tint nor softer in tone. The Indus was bluer and clearer than we had previously seen it, and its colour was gloriously set off by the shining gold of the sand-fields around. We advanced steadily over the deserts and across the nalas that were so pleasantly passed on our upward journey. In just three hours I re-

entered Bazgo, and led my pony into the *serai* stable. Zurbriggen came in about half an hour later, and McCormick an hour and a half after him; but for the food-bearing beasts and the servants we had to wait till four o'clock; and a hungry waiting it was.

Immediately on my arrival I mounted the hill behind to visit the *gonpa*, which Shawe advised me to investigate. It is a poor little place, and its temple possesses no architectural merits—a mere barn, and dirty at that. At the end, opposite the entrance, is a big, bad statue of Chamba, seated on a chair with his legs straight down in European

posture. The figure is made of plates of brass fastened over a framework. It is about thirty feet high, much too big for the temple, the head being hidden amongst the rafters. There is a row of very poor figures of incarnations and gods in front of the big figure. There was one fairly good brass figure, and a small well-finished clay figure of Nam-gyal-na-wang, elaborately painted and gilt, and with a portrait-like face. The lama declared that it had been made in the *gonpa*, and not brought from Lhasa. Along both sides of the temple were a quantity of books, and amongst them a mass of old ones written in gold, silver, and copper letters on a blue ground. They aroused my cupidity, and I grabbed at random a lump of one hundred leaves and began bargaining for them. It was a long business, but ultimately, with inexpressible delight, I was enabled to stow the prize in the keeper's pocket of my climbing coat, and thus to return with hidden treasure through the village.

A long, long waiting followed. It seemed that the baggage would never come. The wind rose and howled amongst the trees, and the warmth of the sun was swallowed up. At last the animals appeared in the distance, and a period was put to our suspense. The tents were pitched in their old places, and the usual round of camp occupations led the day to an early close. Its last event was the secret arrival of a man from the *gonpa* bringing another well-written blue book. I purchased that also, and turned in in a satisfied frame of mind. I did not know the chaos that reigned in the library, and that my manuscripts, instead of being single works, were samples of the whole collection—a leaf from this volume, a leaf from another.

October 2nd.—The morning was again delightful after the frosty night, a clear sun, a bright sky, a merry breeze, and all Nature at its best for light and colour. As we ascended the zigzags to the high desert fan, the view back was as charming as it had been when first seen under the afternoon sun. The *gonpas* perched on their crags were

just scraped and touched with light, which lay broad on the fields below, and made the yellow foliaged trees shine like transparent gold. The ruins and the old *chortens* in their long ranges and groups added to the picturesqueness of the scene, which was of course framed within and beneath noble hills, and there were white puffs of cloud against the blue above. Once on the undulating desert nothing can be imagined more delightful than the gallop with which our ride began ; the fresh breeze about us and the flying clouds above seemed to hasten to keep us company. In two hours we were down in the lowlands again amongst the fields of Saspul.

Shawe advised me to visit the old rock-cut chambers in the hillside under the ruined castle, so I appointed the place for lunch. We first visited the new *gonpa* by the roadside. Its temple consists of an outer and an inner chamber. The former is square on plan, and has a central square a storey higher than the four aisles around it. The upper storey is carried on four pillars. In this chamber are a few books and the divans for the lamas ; it is the *Dü-khang*. In one corner is a stone about four feet high on which are rude bas-reliefs of human figures, one seated, the others, patched about, standing. The lower parts of the standing figures have been destroyed by fracture of the stone. The work is clearly not of the present period, but it is wretchedly bad. A higher shallow chamber, containing three colossal mud figures gaily painted, is behind the first. The central figure, in a niche or apse, is a seated Chamba. The two others stand, one at the end of each short transept ; they are smaller than the Chamba. The wall-paintings are as crude, new, and bad as the figures. I found a decent statuette of Tsong-kha-pa, which the lama willingly sold me in the presence of many villagers. He was at the time engaged cutting a wooden block to be used for printing. The letters were carefully written on the block with ink, and he had carved about half in relief, beginning from the bottom and working up. My old friends.

the fifteenth century Woodcutters of the Netherlands, would have recognised a fellow-craftsman in this lama.

Leaving the new *gonpa* we crossed the fields behind, and scrambled up to the old rock-cut chambers. The rock is conglomerate, and the chambers are all of irregular form, some very tiny—not more than large enough to hold one seated man. Most of the chambers have their front wall built, and not left standing by the quarriers. The method of making all rock-cut *gonpas*, of which so many traces are found in Ladak, was everywhere the same. A number of chambers of various sizes and shapes were dug out of the face of the rock in rows and storeys. A façade of crude brick was built a short distance in front of them, so that really the excavations formed only portions of the chambers. The connecting staircases and galleries were also included in the built-up part of the structure. Many of the walls have fallen from the Saspul *gonpas*, and the place does not appear to have been inhabited for a long time. The chambers are scattered about in utmost irregularity over an area of a quarter of a mile or more. They must have formed a whole row of *gonpas*.

The ruins are chiefly interesting for the remarkable wall-paintings with which several of the larger chambers are still covered. All the paintings are in the same style of art, which is strikingly Hindu as opposed to Chinese. There are hundreds of seated figures (each covering an area of about three inches square), and amongst them are some larger ones of gods, devils, and the like. There was a seated saint, teaching, surrounded by some fifty or more minute disciples. There was the figure of Avalokita with the Thousand Eyes,* so popular hereabouts. The paintings were done on irregularly laid plaster, with which the nubbly conglomerate walls are covered. In one case a portion of the paintings was on canvas, and a bit of this had fallen from the wall and was blowing about in the dust, so I carried it off. We visited the small modern

* See Dr. Waddell's paper in the Royal Asiatic Society's Journal, 1894.

gonpa which takes the place of the collection of ruined caves, but it was locked up, and no one was there; we looked through the door-chinks and then found a way in, but there was nothing worth seeing inside.

After a hasty lunch we started away again at 12.15, laden with apples and a nosegay of African marigolds, which an old woman gathered for me. The Ladakis are lovers of flowers, and almost every cottage has its little garden patch. Fresh plucked blossoms lie on the table of offerings in every decently cared-for temple. We accomplished our second *parao* quickly, and reached Nurla * at three o'clock. After a dreary waiting for an hour or more I discovered a *gonpa* on the hillside, and hastened off to visit it. It was very small, a mere chamber and portico on top of a farmhouse. The lama was in the portico, and received me with smiles. The wall-paintings, hundred-handed figures, books, and all else were of the poorest sort, but the old fellow had a lot of copper stuff of good workmanship, which he was ready to part with. I plundered him, much to his satisfaction, amongst other things of his rosary, but he afterwards repented, and came down to the tents to get it back, crying that he wanted his *mani*.

October 3rd.—I slept the sleep of the just to such purpose that the others were all up, dressed, packed, and striking their tents before I awoke. The result was that it was past eight o'clock before we started. As I wanted to have a long afternoon at Lama-yuru, I stayed behind with the baggage-mules and kept the men up to their work, which made a material difference in the pace. We had as road companions three well-to-do Yarkandi merchants on their way to Calcutta, whither they annually go for the winter months; they begin their return journey in April. Going in the midst of a caravan of men and ponies is not so peace-

* Or Snurla: thus Pittak or Spittak, the initial "s" being a common addition to Tibetan names. The names Askole, Askardo, Askoro, are the Indian pronunciations of Skole, Skardo, Skoro, which were originally Kole, Kardo, Koro.

ful a way of travelling as trotting on alone, but there are more incidents to occupy one's attention. The loads were for ever coming loose, or slipping too much over to one side; the ponies got in one another's way and tangled their burdens together. Once a dog conceitedly barked at us from afar, thinking himself safe amongst the rounded boulders, but a Gurkha cast a stone at him which, falling on a polished rock close by, burst like a shell into a hundred fragments, and many of them hit him. He uttered a howl and cowered down in silence, making himself small among the rocks.

We often noticed, high up on the mountain-sides, stripes of a different texture, seaming the long *débris* slopes. They were usually straight, but sometimes curved round below to one side or the other, and in this manner two or more would now and again cross one another. This day we discovered the cause of these path-like lines. It appears that very high up in the hills, quite out of sight from the valley bottom, a certain amount of grass grows. This is partly fed off by the goats and partly cut by the peasants, who make it into bundles and roll them down to the valley. It is the rolling down of the bundles that makes the stripes.

After three hours' riding, during which we halted to eat apples at Khalsi and made another brief stop at the weak and lofty Indus bridge, we came to the angle of the side valley that leads to Lama-yuru. We turned round for a moment to take a last look at the blue river we were leaving, and the valley in which we had wandered so long. How blue were the waters! how desolate the valley! The sun was shining straight down into it, and all the slopes glowed bright from side to side without a shadow. In a few minutes river and valley were out of sight and we were rapidly approaching the Lama-yuru gorge. When the first *dāk* hut was reached, a little before noon, we halted for lunch, where we halted before.

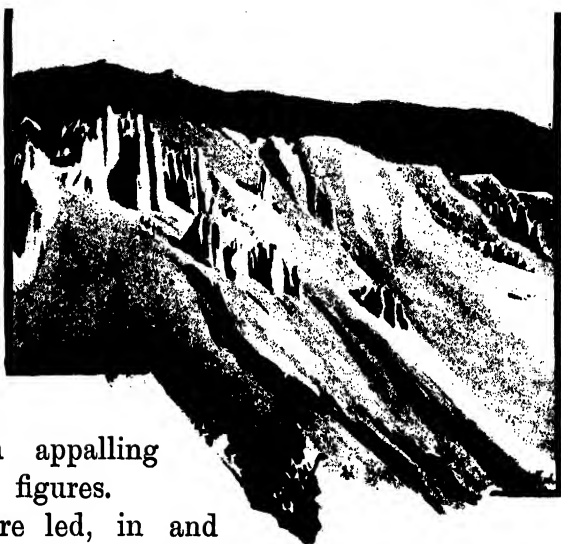
The remainder of our way was fine, but struck us less than when we first rode along it, for then the early sun

brought all the crags out in bold relief, whereas now the sky was heavily overcast and the valley illumined by diffused light. This, however, had one advantage: we were enabled to see the local colouring of the rocks which was before disguised in bright light and purple shadow. The set of earth-pyramids (for precipitancy and boldness of position amongst the most remarkable I ever saw) now proved to be equally notable for colour, consisting as they do of the *débris* of orange, violet, green, and grey rocks. We did not linger on this portion of our route, but, urging our ponies forward, made rapid progress. My beast was evidently the property of a pious Buddhist, for he always took care to leave the *mani* mounds on my right hand. The worst of it was that he often mistook any big rock for a *mani*, and would make wild dashes away to the left into the broken stony ground to get the advantage of imaginary prayers. Shortly before two o'clock we cantered into Lama-yuru, and our day's march ended.

I immediately inquired the way to the *gonpa*, and started off with the lambadhar to visit what I imagined to be one of the most interesting *gonpas* in the country. It is built on the top of a mass of conglomerate which has been cut up into pyramids. Beams have been laid across to bridge the chasms, and buildings have been raised on these frail foundations. As we walked up I perceived plenty of old chambers cut in the conglomerate, and at other parts of the day's march we also saw the like. Some of these doubtless belonged to ancient *gonpas*, and it seems not improbable that rock-cut *gonpas* were the earliest in these parts. At all events it is worthy of remark that the places where now the 'largest number of old *chortens*, *mani* mounds, and the like religious monuments are most numerous are almost invariably in the neighbourhood of conglomerate deposits, the only kind of rock in this hard-rocked country that can be hollowed out for the formation of cave chambers.

The appearance of the upper level was promising. There was a striking assemblage of painted *chortens*, and the

inequalities of the ground made the buildings necessarily irregular and accidentally picturesque. We were first conducted into a temple, whose body consisted of a two-storeyed square surrounded by a low aisle. At one end was the portico through which we entered, at the other was a kind of sanctuary divided from the main square by a screen. In the square were a few long low divans for the lamas. In a niche in the middle of the end wall of the sanctuary is a large and bad figure of Avalokita. There was a row of other divinities on either side of this, and, mixed up with them or in front of them, a lot of seated saints and incarnations — all bad work, the best being on Clowan, a favourite in these parts. The walls are profusely and wretchedly painted, with an appalling multitude of little figures.



EARTH-PYRAMIDS NEAR LAMA-YURU.

Thence we were led, in and out, up and along, through doors and twisting passages and galleries, like the Gibraltar casemates, and so at last into a small square from which the *Dü-khang* opened off. Here there were again rows of divans, and in one corner about a dozen lamas were seated, eating their meal out of little cups. This chamber was likewise square, with the usual two-storeyed middle and aisle round. There was an effect of good rich colour about the place arising from the quantity of old kakemonos, bits of silk, staged umbrellas, and other stuffs hanging about from every available point. The effect was, moreover, increased rather than diminished by

the dimness that prevailed throughout all the interior, and especially under the aisles. The statues across the end were little better than those in the temple. Most of them were of big-hatted figures, and these had the usual Varallo-like effect, though poorly and cheaply attained. Along part of one side of the chamber was the book-case, containing big volumes, one of which I purchased by night. The book-case was covered in front by a hanging of printed calico, which they informed me was made at Machin. The design printed on it was in two rows of niches, divided by columns, the upper row being surmounted by canopies. In the upper niches were small seated figures of the Buddha sort; in the lower niches were larger standing figures of the god and devil kind, wearing much folded drapery, showing Hindu influence.

I returned to the camping-ground by another route and found the baggage arrived. Shortly after the tents were pitched a little snow began to fall, accompanied by blasts of wind, but as the sun presently shone out, making thunderous black by contrast the cloud-curtain in the north, I started up to the *gonpa* again with the photographic apparatus, and entered the *Dü-khang*. There, to the wonder and delight of the monks, I illuminated the row of sacred figures with the profane brilliancy of magnesium wire. We turned in almost immediately after dinner, and I was the more glad to do so as a chill came upon me and all the premonitions of an ordinary cold, caught when, how, and why it was difficult to imagine.

Late in the evening a man came down from the *gonpa* with a manuscript, which I bought. He was sent back for another, and that also came in due season. They were not large ones, compared to the biggest, but they appeared to be complete and they retain their original wooden bindings and leather straps. This successful intrigue consoled me for my cold. Soon after the treasures were snugly housed in my tent I went to sleep under a pile of all the wraps I could gather together.

October 4th.—We determined to make an effort to do two long marches over the passes and so to reach Shargol in one day. We awoke before it was light and finished our packing, so that the bulk of the baggage could start well before six o'clock. To get thus early on the way for mere road travelling on a wintry morning is a much less cheerful experience than the habitual early starting in the high regions during the summer months. I wrapped myself up well, but, cold without and cold within, felt as good as naked, and went coughing and sneezing forth into the shadowed valley and bitter wind. The streams were all frozen, and sheets of ice here and there covered the path. Our advance, therefore, was miserable enough, and the more so that I judged it better to stay behind with the baggage and urge it forward. We reached the top of the Fotu La in less than two hours, but even there the cold wind quite neutralised the sun's warmth. I took shelter under the sunny lee-side of the *chorten* for a few minutes and just succeeded in getting a little sensation into my chapped hands. The last view towards Ladak might have been beautiful under other circumstances, for it was clear and rich in colouring, but I was too miserable to find enjoyment in any beauty whatsoever. I forged ahead down the descending valley and came, ultimately, within sight of Kharbu; but, though going only at a moderate pace, the wretched baggage ponies and their listless drivers lagged far behind, so I rode a couple of miles back to meet them, and took the driving into my own hands. The men, however, were incompetent to properly load a beast, and the kiltas kept tumbling off and having to be readjusted. Ultimately all but one of the ponies were sent quickly ahead, but the remaining beast shed his load every ten minutes. At last I abandoned him and sent some men back to bring him and his burden in. They arrived at Kharbu two hours after the others.

During the morning Zurbriggen had an adventure which I shall for ever regret not seeing. He was riding

quietly along a sandy place with both hands in his pockets, when the crupper broke; the pony halted, and Zurbriggen went beautifully to ground over the beast's head. A peasant helped him to readjust the saddle, and he mounted again, but before he had gone ten yards the apology for a girth broke, the saddle twisted round, and down he went again, this time spraining his thumb. His foot was caught in the stirrup, and the pony started running away, but fortunately the stirrup leather (probably string) followed the example of the other parts of the harness and parted, so that he was not dragged. "Fortunately," he afterwards said to me, "I was going very slowly; *Wissen Sie im Galopp, wenn Einer caput geht so ist Mann aber.*"

After lunching and changing ponies at Kharbu we started away behind the luggage at 12.45. The new beasts were a better lot, and so were their drivers. Accordingly all reached the Namika La together at three o'clock. We halted a few minutes, rather for form's sake than anything, for the wind was howling, and the cold was worse than ever. We then left the baggage behind and hastened down as fast as possible. McCormick presently smashed his apology for a whip; his pony at once perceived the position of affairs and refused to move out of a walk, so that Zurbriggen and I left him behind. He ultimately discovered that violently waving his fur-lined cap about the animal's eyes scared him into somewhat of activity. Whilst thus preoccupied McCormick missed his way and arrived in a village, where his wild appearance and unwonted actions terrified the population, who all straightway took to the hills. Ultimately he wooed a woman back within shouting distance, and she directed him into the right way. Zurbriggen and I reached the carved figure of Chamba on the roadside rock in an hour from the pass. We only halted there for a moment, but I noticed, what had before escaped me, that the figure used to be covered by a wooden canopy, the holes and ridge for supporting which remain in the rock. The Gilgit figure was once similarly protected. The new-

ness of the surface of the carving, as compared with the surface of the weather-worn rock about it, also struck me, and I doubt whether the carving can be more, at an outside estimate, than two hundred years old. We cantered all the rest of the way, and reached the Shargol *serai* in forty minutes. We had to wait almost two hours before our baggage came in with the gathering dusk.

In the *serai* an amiable Yarkandi merchant was in possession, with a large caravan of ponies. He was carrying carpets, *namdahs*, and especially *cheriss*,* to Kashmir and Amritsar. He said that he had made the journey for many years, and was instant with inquiries about the Kanjut road, which he hoped to take for the future. He spread a red *namdah* for us in the veranda and served us with tea and sugar-candy, which were most welcome. Unfortunately our common stock of language was soon exhausted, or I might have learnt many interesting experiences from him. As I knew no Persian, and he but little Hindustani, we had to fall back on a bargain to fill up the time. The red *namdah* was the only thing to bargain about, so I ended by buying that.

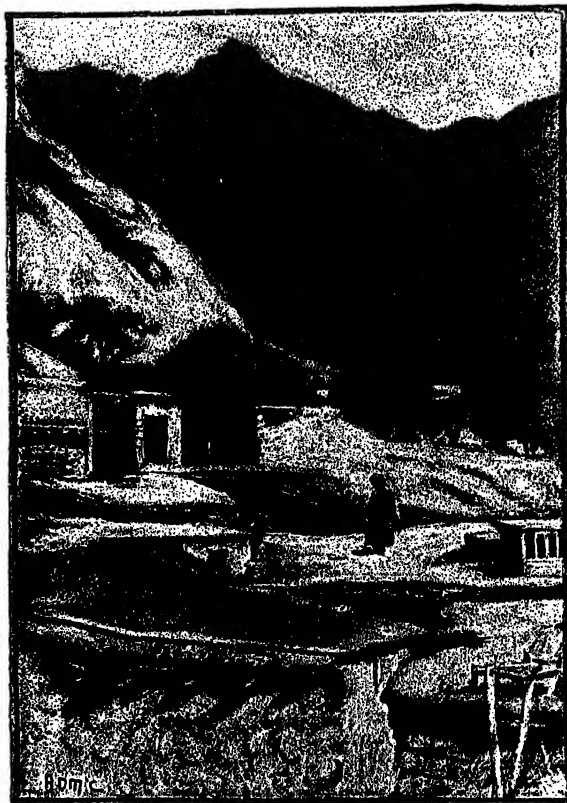
October 5th.—After sending off the baggage and seeing the others started, I went up with Harkbir to visit the little rock-cut *gonpa*, whose whitewashed façade with its red decorations is visible so far afield in the neighbourhood of Shargol. A steep path led to the door, which gave access to the middle storey of the place. The various rooms, of which there are plenty, are all roughly hollowed out of the conglomerate and connect with one another by irregular passages. The top storey is the best finished and is provided with balconied windows and a terrace above. The front of the whole is formed by a wall of crude brick. If this was to fall away the various chambers at their irregular

* *Cheriss* is a preparation of hemp, a tolerable substitute for opium, they say. I tried it, and found it not bad. If the anti-opium people have their way the demand for *cheriss*, which is now falling off, will be revived, and the Karakoram pass route will become busier than it has been of late years.

levels would be disclosed, and no one would suspect that they were intended to form together a single house. The temple chamber is the largest, which is not saying much. It is poorly painted with modern work. The figure of my favourite lama saint, Tsong-kha-pa, is prominent on the left wall. Opposite the door is the usual Avalokita one, and of the usual feebleness and gaudiness. There was

only one seated statue and no small objects of interest, but the three or four MSS. were carefully and tidily kept, and the man utterly refused to part with any of them.

Shortly before nine o'clock I started to follow the others and trotted gaily down the narrow valley with its babbling brook shaded by a succession of autumn-tinted trees. I passed the long caravan



FARM IN THE WAKKHA VALLEY.

of my Yarkandi friend, and many other processions of laden beasts ascending or descending the much-frequented road. I came up with the others before long, and we left the luggage far behind. About half-past eleven we reached the southern edge of Paskiyun, the first of the two large cultivated basins through which the Wakkha flows. Here there

are a bridge and some pleasant trees, under which we rested on the way up. They again looked so inviting that we determined to halt for lunch. There was a long wait before the baggage came in. We beguiled the time in our usual way by throwing stones for Pristi to run after, or making them bounce from a smooth rock in the midst of the stream on to the opposite bank—a game that I shall not soon forget, for I nearly crushed a finger over it.

After lunch we put our ponies to their best pace and cantered over the large desert maidan and down its dusty edge to the bridge, fort, and *serai* of Kargil. It was a bright afternoon, and the march was pleasant, but it lacked that glamour of novelty, that starting forth into the unknown, that ideal plunging into the mysteries and wonders of the heart of the great historic continent, which made for me the upward march over the self-same sands and stones like a journey through fairyland. To-day actuality reigned. How vastly preferable is the ideal to the real!

Late in the afternoon our Yarkandi friend came into camp. He fulfilled his promise to show us some of his goods, and we purchased from him, probably at exorbitant rates, certain Yarkand and Khotan *namdahs*. It appears that there is a very good reason why these men should bring down so many *namdahs* with them, bulky and of small value though they be. A layer of *namdahs* forms an excellent pad for the packhorse's back, and weighs little. In fact something of the kind must be taken to spread the weight of the *cheriss*, which bulks small. The *namdahs* find a ready sale in Kashmir, where they are dyed and embroidered.

All the afternoon at Kargil I was possessed by the feeling that our journey was at an end. We telegraphed to Kashmir for boats to meet us at Gandarbal, and to Roudesh to come up the Sind valley towards us. As I looked round the tent and saw a hole or two that required attention, instead of setting to work to mend them, I said to myself, "Holes are of no consequence; in a week we shall

be living in houses." With this reflection there settled down upon me the melancholy that belongs to the endings of all things, and counterbalances the fresh bright hopes with which they began. The last full moon we should see in Kashmir shone over the broad maidan. The beauteous scene was so fascinating that we even talked of making a night *parao*, but better counsels prevailed, and before long we were journeying in the featureless land of the dreams of the healthily tired.

October 6th.—After seeing every one started at 7.30, I remained behind to enjoy my pipe under the shelter of a wall in the bright morning sunshine. It was amusing to watch the place from which the tents were recently removed. No sooner was all clear than a motley crowd took possession of it. There were thirteen magpies, a crow, a lot of goats, and a dog. They left one another in peace, and all explored diligently for traces of abandoned sustenance. I presently trotted after the caravan, as quickly as my poor pony could manage, and came up with the baggage, but McCormick and Zurbriggen, who were well mounted, left us far behind. They had the fun of waiting two hours for us at the luncheon place.

I was again struck by the vistas up both the Suru and Dras valleys from their junction angle. The latter in the broad morning sunshine had a fine largeness of aspect, due to the simple dignity of the chief lines in the view, the single bend of the river below, and the sweeping hillside that curves down to it and was smitten with one large dash of shadow from top to bottom. We presently mounted high above the Dras river and looked down into its clear waters at various angles. They afforded a rare feast of colour. In some places their proper blueness was added to and enforced by reflection of the bright sky. Elsewhere chance shadows, or the shining through of rocks not deeply submerged, made the flowing torrent like liquid sapphire. Anon it was opalescent, and the shallow edges of the stream were always purple. Nowhere, however, did it manifest the

extraordinary turquoise tints of the upper Indus, but Nature's storehouse of beauty is filled with an infinite variety of charms, and I could not discover whether Dras or Indus wore the lovelier colouring. Certainly it would be difficult to imagine anything more beautiful than the clearness and the tint of a calm deep stretch of the Dras as I saw it when looking down from the top of the cliff opposite Hardas. It was like the greenish-blue flint glass used by Dolland and the old opticians for the objectives of telescopes, only it was not glass, but as it were a magic thing with the gloss and splendour of a woman's hair in it, and the brightness of sky. Such must have been the crystal depths wherein the poets saw the mermaids play.

Over against Kirkichu is the bridge we crossed on our upward journey, and here we again entered new ground. A few rocks, close by the dâk walas' hut, are covered with a number of recently engraved figures of ibex with enormous horns, well enough drawn, and especially so in contrast with the human figures scratched beside them. These were as feeble as the figure of the man with the famous Urus, drawn on a bone by a paleolithic artist of ancient France.

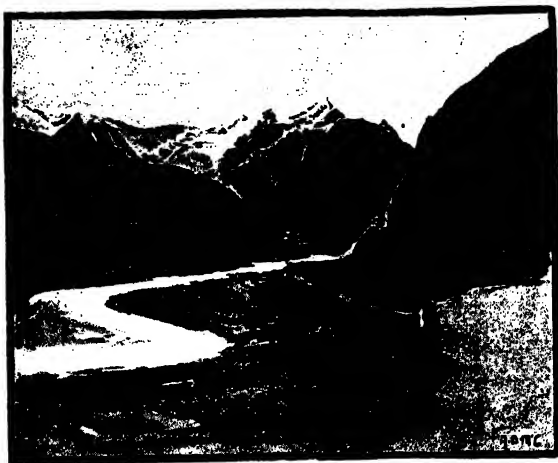
During the remainder of the march there were some fine bits of gorge scenery, and here and there some noble crags and precipices of rock. The effects, however, would have been on the whole monotonous, and the more so owing to the hiding of the sun, but for the astonishing splashes of autumnal glory dashed here and there on the lower slopes and congregated in a long procession beside the river banks. Every mile traversed brought us into less barren land. There was a little grass even on the lower hillsides, and shrubs were scattered about them. Nearer to the water, rose-bushes and other shrubs were always to be seen. A few junipers here and there appeared, and many willows by the margin of the stream. The shrubs on the slopes were all crimson and orange and gold. One blood-red carpet, on which a ray of sunshine fell, burnt itself for ever into my memory. But it was *Myricaria elegans* that displayed

most variety. We saw it first in Bagrot, clothed in fresh green below and heavy above with an elaborate pink and white efflorescence. It followed us through Nagyr to Hispar. We found it again at Askole laden with ripe seeds, and here by the Dras it came to bid us farewell, still retaining its green below, but passing higher up into purple, or purple below and crimson above, or the crimson giving place to a yet brighter red. Clumps of it displaying every shade of these colours were continually to be seen, rising out of the dark purple rocks, in contrast to whose solidity the feathery grace of the branches gained an added delicacy. At four o'clock I arrived, with the baggage animals, at the *serai* and pleasant *bagh* of T'ashgom, the welcome end of a long and in places somewhat tedious march.

October 7th.—We started, not without a struggle, by 7.30 in the cold morning air. On these days of deep valley travelling and belated sunrises the first part of the march was always a painfully chilly experience, and we looked anxiously forward to the first bit of road, across which some gap in the eastward mountains should allow the sun to strike. The time seemed long till we reached the desired locality, and an agreeable warmth slowly permeated our frames; but too soon we were plunged once more into the shadow, and felt the cold by contrast even worse than before. A longer spell of sunshine would follow, and then a briefer shadow, till at length the sun climbed high enough to look over all the hills, and perhaps its heat became even too oppressive. By the middle of the day the sky was usually more or less overcast, and in the early afternoon the blue-patches grew smaller and smaller. A cold wind began to blow, and every afternoon, long before sunset, we were impatiently awaiting the slow baggage and counting the moments till we could take shelter within the new pitched tents.

The scenery through which we passed did not differ in character from that of the previous day, but the snow-

powdered peaks ahead, with one or two little glaciers hanging on their flanks, came nearer to us and more grand of aspect. When we reached the Dundul angle, where the Dras valley turns sharply to the west, the character of the scenery underwent a change. We mounted to a large alluvial plateau and traversed the area of an old lake-basin, at the far end of which we quitted the neighbourhood of the river for its ancient bed, divided from the stream by a considerable rock ridge, of whose existence the map gives no indication. The lake-basin and old river-bed are large fertile areas, which herald the approach of rain-blessed regions. The harvest was reaped off them and the grass altogether burnt up, so that the effect of fertility was not striking; but in springtime this poor region must look bright indeed to a comer



LOOKING UP THE DRAS VALLEY OVER THE FIELDS OF PALA.

from the desert world. The sunburnt grass, however, was a lovely feature in the landscape, for it shone, when the light fell upon it, like old gold abroad over the hillsides and valley floor. The proximity of Dras was proclaimed by two monoliths bearing old Kashmiri carvings set up by the roadside. They and a recumbent fragment or two of small artistic merit are obviously the remains of some ancient Kashmiri temple, a religious outpost towards the wilder lands. Beyond these stones the slope falls away, and in a few yards the fort and *serai* of Dras become visible lying in the midst of an old lake-basin.

Their position is fine, and reminded me of the beautiful Veglia Alp, one of the most charming and (fortunately) by tourists most neglected spots in the Alps. A grand series of mountains surround the hollow, and valleys radiate from it. The true continuation of the Dras valley is the Mushki, at the head of which lies a pass to Gurais; the upper course of the Dras river and the way to the Zoji La are in a subsidiary valley, out of which the waters have forced their way through after much cutting of opposing rocks.

We halted at Dras for lunch at 12.30, and spent a pleasant hour there in conversation with Colonel Le Messurier, whom we met on the march the day we arrived at Loh. After an hour's repose we continued our way, mounted on fresh and better ponies than the weeds that Tashgom produced. The river above Dras flows through some fine bits of rocky gorge into which we looked from the level land above. The water has worn the rocks smooth, and their polished surfaces reflected the blue sky and shone with a startling brilliancy of colour, which admirably enframed the richly toned water, gliding silently and unrippled amongst them. Our surroundings, when the Dras basin was left well behind, became increasingly sublime. Craggy mountains of grand form approached the river, rock precipices looked down upon us, the area of sky was narrowed. In the midst of this region we came upon the picturesque hamlet of Pandras, which seems to grow out of the rocks, and almost to form part of Nature's own handiwork. It was curious hereabouts to notice how the natives perch their piles of new-collected hay upon the top of jutting rocks as though to invite the havoc of the wind. Such stations are of course merely temporary, and we saw many burdened peasants carrying the crop on their backs to the homestead storehouses. Three of them were actually wading the river, waist-deep, bearing monstrous loads, the men being entirely hidden in hay and water, so that the bundles seemed to be progressing miraculously alone across the stream.

The road led to a high bridge by which we crossed to the right bank, where we met a couple of Yarkandis coming in the opposite direction. They asked "the way to Yarkand"—rather a large inquiry. We showed them the bridge, told them all we knew of the way, and I hope Hermes smiled. Over a grassy mound we scrambled, and then a broad, flat-bottomed valley spread winding away with wide sweeping hills curving down to it on both sides and shining with a fine old gold colour in the afternoon sunlight. It was an ample and generous view that led the eye upwards and onwards and seemed to suggest a way to lands beyond. We descended to the level valley-floor and let the ponies canter along it as fast as they pleased. Snow mountains appeared in front and on either hand, one in particular attracting our attention by its graceful white pyramid, a form common in the Alps, though rare, or indeed entirely absent from the trans-Indus ranges. We made rapid progress over the long level of the upper valley, which spreads uninterruptedly from the bridge to the Zoji pass. In a short time we rounded the end of a small *débris* fan and found ourselves close to the bleakly situated and miserably built *serai* of Mutain, where we dismounted at 4.30.

The usual long wait for the baggage followed, and never was its swift advent more eagerly desired, for the wind was cold and all our surroundings utterly comfortless. At last, with the red flush of sunset, it came, and the tents were swiftly pitched. Simultaneously with it there also arrived from the opposite direction the Rev. Father Donsen, of the Ladak Mission, on his way to Leh. We sent at once to invite him to dinner and turned out our dwindling stores to entertain him as well as we could. There was only one tin left, which proved to contain fish. Soup there was none. The banquet therefore opened with fish. When it appeared the good father leaped from his seat. "What fish! Friday! Are you Catholics, then?" We spent the evening together, and in return for what we could tell him of his

fellow-missionary, Father Hanlon, whom we saw at Leh, he gave us news of the pass, and did not comfort us by his account. At an early hour we turned in, after taking one glance at the glorious moonlight which made silver of the mountain snows and velvet black the shadows on the rocks.



LOOKING UP THE DRAS FROM BELOW TASHGOM.



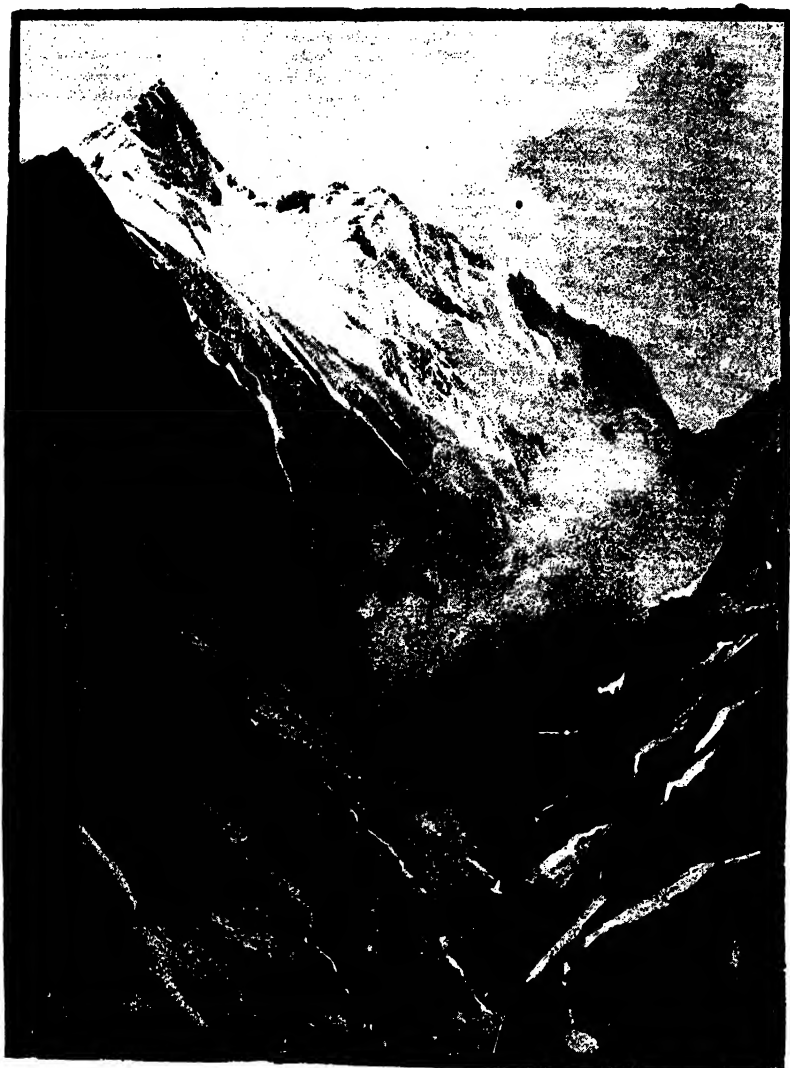
THE HEAD OF THE SIND VALLEY FROM NEAR THE TOP OF THE ZOJI LA.

CHAPTER XXX.

OVER THE ZOJI LA TO SRINAGAR.

October 8th.—Our pony men and those accompanying Father Donsen made an arrangement amongst themselves to exchange employers. We had no objection, but when the morning came our men were on hand with their ponies, ready to start, whilst Father Donsen's were nowhere visible, so we loaded up our baggage and off we went. It was eight o'clock before we were fairly on the road, and just then the lazy Kashmiris began to turn up with a pony or two. We kept behind the caravan all the morning and urged it steadily forward, so that good progress was made. There was no change in the scenery as far as the large basin of Minimerg, where valleys join and fine mountain vistas radiate. Beyond the basin a valley step has to be mounted

before the upward slope resumes its gentle inclination. The bare grassy slopes and boggy places, with the ragged rocks and their snow drapery above, reminded me of the scenery



APPROACHING THE ZOJI LA.

just over the south side of the Simplon pass. As we approached the last fork of the valley, fresh snow lay by the path in shady places, but we had none to cross. On

the final flat we put up two wild duck, which were swimming on the diminished stream. A quarter before noon we discovered that the waters were flowing in the opposite direction from before. We had crossed the watershed without knowing it, and were already a hundred yards beyond it, descending into the vale of Kashmir. The height of the pass is said to be 10,300 feet.

A little way further on we came to a quiet lake, and the downward slope became perceptible. It was surprising to find in two or three places the considerable remnants of spring avalanches. If these abide from year to year it is hard to understand why small glaciers are not formed. Possibly the excessive rainfall of the season of 1892 may have hindered the usual melting. There was one such pile of avalanche snow only about a mile above Sonanerg—at a height, that is to say, of 8,500 feet. The main stream was still bridged in two places by snow accumulations, thoroughly packed into ice, and over the lower of these all crossed to the foot of some ascending zigzags, which brought us again almost to the level of the pass. From the col itself there was no view worth speaking of, but every westward step brought us into scenery increasingly fine. We came almost immediately into the region of the birch, a forest of which, quite bare of leaves, covered a slope on our left hand. We passed a pretty little rock-bound waterfall in a secluded corner close to the pass, but the first striking view was from the reascending zigzags, which look down into the gorge with vertical sides, vertically stratified, through which the river seeks the levels of Baltal. When the snow is thick in winter-time the route to the pass lies over it straight up the nala's bottom. •

The sun shone graciously, and the sky was clear. There was a delightful feeling as of spring in the air, and the burnt grass emitted a faint, hay-like scent. We traversed slopes of herbage that was not scanty, dotted over with withering flowers. The bare birches, throwing back lines of light from their graceful stems, hung like a

gossamer haze upon the slopes. Travelling thus through the pleasantest regions, we came suddenly to the edge of the steep descent, and saw the fair Sind valley winding away before us with forests upon its slopes and the wide grass-lands of Baltal at the opening of the sacred vale that leads to holy Amarnath. A set of snowy mountains, thoroughly Swiss in form and altitude, crowned the skyline of the view. We dismounted from our ponies, and, quitting the zigzags, struck straight down the mountain-side.

We soon left most of the 2,000 feet above us and were entering upon the gentler slope when the glory of the prospect arrested our steps. The foreground was a wide sloping area, covered with gold and amber of every shade, the bribe of autumn to the birch woods to let her strip them bare. Into this golden bed the envious mountains stretched down their rocky arms, whose various crests were emphasised by long-drawn files of slender pines. In the blue valley of Amarnath the river showed here and there its silver bends. The blue sky above was pale and clear, and masses of round white cloud were pushing themselves aloft into it as though scorning the little snow-peaks at their feet.

Passing the foot of the deeply shadowed and impressive couloir, into which we looked from above, and down the snow of which goes the winter route from the pass, we came at 1.15 to the miserable huts of Baltal, where we found a sahib comfortably lunching. He was on his way to Skardo for a few weeks' shooting. His shikari was the brother of Roudebush's Shahbana, and the fellow told us all the news. He had heard that Bruce had sprained his ankle, but was now well again and gone to Gilgit. He said that Roudebush was in Srinagar camped in the Chinar Bagh, and that our baggage had arrived both from Gilgit and from Skardo. He knew everything we had done and much that we had not. He told us the names of all the sahibs then in Kashmir, and where they were all encamped, what each of them had

shot, and where he shot it. He said that Dickin went back to England a month ago. A vessel so full of gossip I never before came across, but almost all he had to tell was either false or inaccurate.

After an hour's halt we started off again down the valley, expecting great things of its far-famed beauty, but we were doomed to disappointment. A roof of cloud shut out the sunlight, which was a disadvantage, but at no time can this upper part of the Sind valley be of extraordinary beauty. The forms of the limestone mountains that bound it are neither graceful nor grand; their slopes nowhere compose very picturesquely. There is, of course, the constant valley charm, but it is not of a high order. To us, coming from barren regions, it was delightful to find roots burrowing across the rough pathway, and to wander amongst shady trees. The sight of a fallen trunk that no one cared to carry away was itself remarkable as bespeaking a profusion of timber. The southern hillsides were clad with forest, and in one place a withered wood (killed, said Zurbriggen, by overcrowding on a shallow soil) stood out as a purple mass amongst the surrounding green and gold.

We followed the stony path at a leisurely pace and reached the over-vaunted camping-ground of Sonamerg shortly after four o'clock. It is a pleasant place enough, but nowise striking, the only exceptional feature in the surroundings being some remarkable slaty cliffs that form the face of a peak to the north. These, under some clouds, crimsoned by the sunset's after-glow, displayed a lovely scheme of colour, and therewith the day closed for our observing eyes.

October 9th.—McCormick and Zurbriggen started away in the small hours, when I was fast asleep, to ride through in the day to Srinagar, a distance of from fifty to sixty miles. What was left of them dined that afternoon with Roudebush. I took my ease in the morning and waited for the warm sun to come and brush away the hoarfrost. It was a few minutes after eight when I left the camping-ground.

The open valley about Sonamerg, in the morning light, had a fine ampleness of aspect, but no special beauty, excepting a pretty glimpse upwards to a bit of snowy crag framed between graceful ridges. The early stage of the march was enlivened by the presence of vast flocks of sheep and goats, not yet scattered to their grazing. The low darting sunlight touched the fleecy backs of the recumbent sheep, and the shepherds picturesquely grouped by them on the grass.

The path traversed a level space on the left bank of the river and descended through some *finé* trees, which make a close foreground to set off charming glimpses of snowy peaks, jagged ridges, and the always lovely forested slopes. From the foot of this descent there was a really wonderful view of blue shadowed valley and shining peaks. The morning light was just creeping over the middle slopes, here touching a ridge crested with firs, and there peeping into a gully full of golden birches. The grassy foreground was striped with the long shadows of scattered trees.

We crossed again to the right bank and continued the enjoyment of marvellous prospects, especially backwards up the valley and across to a group of big peaks that hold snowfields and cascades of brilliant ice in their bosoms. Following the riverside we entered the famous gorge, all too short, the one priceless jewel of the Sind valley. The ample stream of clear water, glacier-fed but not glacier-soiled, tumbled merrily along between straight walls of rock. Two or three beautiful birds flew about amongst the stones by the bank. Their bodies were of a dark blue-black, their tails red, the crowns of their heads white. When we emerged from the gloom of the gorge a sunlit slope of autumnally tinted birch struck me with renewed wonder. There is some green in the colour, which I have called golden, but to my eyes there is always somewhat of green in dull gold upon which the sun shines. This golden background gave an added charm to glimpses caught between the trees of a wood, through which we presently passed. Then the valley opened wide and became like many others,



LOOKING BACK FROM SONAMERG

with grassy and wooded slopes rolling upwards on either hand.

There is method in Nature's distribution of dark firs and golden birches on the hillside. The firs stick to the ridges, where avalanches come not; the birches, which bend unharmed beneath falling masses of snow, have the gullies and snow-swept slopes to themselves. The colouring of the hills thus emphasises their form. We crossed again to the left bank, and had not gone far before descriing a tent which I thought might belong to some shikaring sahib. I rode up to it and was pleasantly greeted by one Lal Khan, a Woods and Forests officer of sorts, in the employ of the Kashmir Government. He caused tea to be made for me and entertained me with talk, recounting the history of his life and the names and qualities of the various sahibs whom he was proud to have served at different times, and in most cases for long periods of years. He regretted not having his book of chits to show me. One of them he boasted was from Lord Dufferin.

Not long after leaving his little tent I recrossed the river and continued an uneventful way, delighting in the broad forest-clad hillside and the twinkling of the leaves near at hand in the sunlight. I reached Gund, the end of the first *parao*, at 1.15, and halted three-quarters of an hour for lunch.

When we were a mile or two beyond Gund the sun was already lowered from his midday height, and shadows enveloped the face of the south-western hills. Thus a soft blue depth was formed, against which all manner of lovely foregrounds passed in turn. I dismounted and walked for a few miles through a park-like country. Continual batches of natives going up valley met me, and the sun was always shining from behind them, making the light cloud of dust that their feet raised radiant about them. The hills steadily lessened on either hand, and their slopes became gentler, but the light of evening's approach was over all, and a great bed of cumulus cloud, lying on the bigger peaks behind to

the east, cast its soft brilliance aloft and seemed to be trying to woo us back to the heights we were leaving so rapidly behind. The path became broader and more level at every turn, so I urged my pony to a canter and completed the remainder of my way, arriving at Kangan at half-past five, when the sun had already for some time passed out of view below the hills.

To sum up, the Sind valley is certainly beautiful, beautiful at any time, but with its autumn colouring specially so. The forms of its mountains are often fine, and they are graced with ample drapery of forest and grass. But the valley as a whole is not comparable with any of the first rank of beauty. It cannot for a moment stand beside the Val Maggia or the Val Vigezza. Its fame comes from people who bring to it eyes tired by the sunburnt plains. To them must indeed be grateful the sight of "its coppices of hazel and hawthorn, its tangled thickets of honeysuckle and wild rose, its picturesque log-built hamlets, nestling snugly at the foot of the mountains, amidst groves of walnuts, apples, and mulberries, and grand old chinars."

My delight was great when I beheld on the Kangan camping-ground three large tents, for my own baggage must, I knew, be far behind. "Here," I said, "are some sahibs who do themselves well," and visions of possibly even beer arose in my fervid imagination. On inquiry I found that the inhabitants of the tents were five Mem Sahibs, unapproachable therefore. For an hour and a half, tired and cold, I had to wander about the place, till the night became so pitchy black that I could wander no more. I heard the merry jangle of plates and knives, but the far more desired sound of the baggage ponies, the most eager listening could not discover. Some kindly camp follower gave me pears that he brought from Kashmir. I hope the Mem Sahibs' dessert did not suffer. "Clearly," I said to myself, mindful of the ready hospitalities of Gilgit, Hunza, and Leh, "we have come down into the regions of

civilisation." At that moment my baggage arrived, and I made peace with the world.

October 10th.—Awoke with rheumatism, caught, no doubt, during the previous night's long wait at sunset for the baggage. A note was handed to me from Roudebush, who sent up a good horse for me with an English saddle. McCormick and Zurbriggen reached him all right at the Nasim Bagh by the Dal Lake. I intended to spend the day visiting the Wangat temples, so sent off the luggage to meet me a little lower down the valley by the ruinous Parang (or Prang) Meshid. At eight o'clock I started with Harkbir and a *gomwala* to show the road.

The man took us up, what was apparently, from the map, the wrong nala, but he proved to be right and the map fatuously wrong. The Wangat nala is the one marked Kanknai on the map, and the village of Wangat is about six miles up it, on the right bank, about 400 feet above the stream. The name Kanknai is unknown to the inhabitants of the valley. The next nala to the west is the Chattergul nala, and in it there is no village named Wangat. The route to Gungurbal and Haramok lies up the Wangat and not the Chattergul nala. In all these points the map is wrong; moreover, it fails even to mark at all the position of the temples, in some respects one of the most important sites in Kashmir!

On leaving Kangan we mounted to an elevated level expanse at the foot of the hills, and traversed it, through devious little shady lanes for all the world like many a Surrey footpath. The sky was completely overcast, but it is on these days of diffused light that the local colour of things appears with most emphasis. From the plateau there were beautiful views both up the Wangat and down the Sind valleys. The lower rounded hills of the Sind, sweeping in a great curve to the left, were all pink and purple; the nearer slopes of Wangat gold and blue. It was a feast of colour. We dismounted to descend a rugged little chine, deep embowered in trees that were dropping gold

on to the broken ground. Thus we reached the margin of the stream that drains the holy lakes, and crossed it by a crazy bridge to the right bank near Wangat village.

The remainder of our journey was always beautiful with the same kind of beauty. The valley is, as it were, in two stages, a narrow wooded trench below, then, on either side, a level belt, cultivated here and there, and finally slopes, wooded or grassy, leading steadily up to the crests of rock

on either hand.

Below, it often reminded me of Wharfedale, nor should I have been surprised to come on some fair remnant of Christian monastic architecture in a place which assuredly the

monks would

have loved. Our way led for the most part through the edge of

the woods, and now and again amongst the few fields. Here the ground was humpy and broken, with continual ups and downs and crossings of brooks, the like of which I well remember seeing in a delightful three weeks' summer's ride, years ago, in the Ardennes.

It was on such ground as this that our guide unexpectedly halted and said, "There are the temples you want to see." The first group of them was in fact but a few yards off, overgrown and surrounded by trees in full autumnal



TEMPLE AT WANGAT

glory that admirably set off the cold grey of the little granite ruins; the second group was hidden from view. Beyond the first group the ground drops away, so that the nearer portion of the enclosure in which they stand had to be levelled by excavation, the further portion by an embankment supported by a wall of rock. The second enclosure was levelled with little labour, and parts of its surrounding wall are still standing.

The first enclosure had two gateways of the Avantipur type, with *antæ* and a pair of columns, both in front and rear of the actual doorway. The gateway of approach is in the midst of the wall as one comes up the valley. The other gateway, which gave exit towards the second enclosure, is, owing to the configuration of the ground, at the far left-hand angle.* The gateways of the second enclosure are on the axis parallel to the valley. Between the two enclosures are the foundations of an edifice of uncertain use. It was square on plan and surrounded by a stately colonnade. Excavation is needed to reveal further details. Above and near to the second enclosure is the sacred pond, the temples in this case certainly not having been surrounded by water. Beside this pool is apparently yet another temple enclosure, in which one little temple still remains, waist-deep in soil, but almost perfectly preserved.

To come now to the enclosures themselves. Each contains a central temple, considerably larger than those that surround it. The central temple in the first enclosure is well preserved, that in the second is a roofless ruin, as the first soon will be unless the trees growing on its roof are destroyed. The stone roof of the central temple of the first group is externally a pyramid, internally a dome. For pendentives there are four massive blocks of stone placed across the angles of the cube below, and with their edges cut into quadrants of a circle and bevelled. The interior walls are plain. There are two doorways with hori-

* Unfortunately I forgot to take a compass with me, so could not observe the bearings of the enclosures, &c.

zontal architraves, surmounted by triangular pediments, recessed within trefoil-headed arches. These doors look up and down the valley. On the other two sides are similar niches, or blind doorways, which appear to have held statues. All the temples are of the same type, though most have but one door and three niches, and in one or two cases the door is a round-headed instead of rectangular opening.

I could discover no symmetry in the arrangement of the small temples around the big one, but excavation might disclose the foundations of others and show that some method was followed. Their corresponding walls are at any rate all parallel. The small temples are roofed with three stages of massive stones, each set laid across the angles of the square below, and with the edges slightly bevelled. The little buildings are well proportioned after a definite canon. The granite, of which most are built, is so weathered that it is not possible to pronounce an opinion on the grace of the mouldings. I only saw one little bit of carving, a lion passant, crudely designed and poorly cut, but I am informed that sculptures of the Gandhara type have been found on this site. It may well enough be the case that an architectural decadence had already set in when the temples were built, but the type was so fixed by long tradition that the main forms could not be otherwise than good. One of the little temples in the second enclosure is specially interesting from the fact that it must have fallen into ruin at a distant period, or never been finished. A cheap superstructure of thin flat stones and thick mud joints was raised on the old foundations, and a number of niches were contrived in the walls, obviously to hold seated statuettes of the Buddha sort.

Two kindly natives conducted us over the place and gave us draughts of delicious milk. I would gladly have stayed longer, but was so racked with rheumatic pains in back and chest that every moment was a misery. I paused, before leaving, to cast a glance over the whole—the poor little

temples embowered in the walnuts, birches, and firs that are laying them level with the ground; the richly wooded valley leading downwards to the fair, invisible plain, upwards to a rounded, grassy hill, about whose foot the main stream bends away, where it comes from the upland wilds, clasped in the great arms of sacred Haramok. The pilgrims' way to Gungurbal turns from the temples sharply up the hillside to the left to climb over a shoulder that bars a lower course. By following it into the upper valley and going north the Satasarn pass is reached. It leads to Tallel and then down stream to Gurais in the valley of the Kishanganga.

I started away from the place with many regrets, sorrowing most of all that a sunny day for seeing it was not granted to me. As we retraced the rough and often steep and stony path through the woods, I noticed quantities of mistletoe growing in the walnut trees. Arrived at the bridge we did not cross it, but continued down the right bank of the stream. Our guide presently led us into a wrong track, which took uphill, and finally came to mere nothingness in the midst of steep wood. We had to dismount and fight our way for an hour or more through the thick growth—a process which frightened my admirable pony into a lather. I was more than pleased to get back to the road, though it was far from good. At last we rounded over on to a broad spreading mountain-foot, covered with fields. It overlooked the open area of the lower Sind valley, and I could not but confess that the large gentle slopes, in the splendour of autumn colouring, and the rich valley floor, with its river of winding silver, made a prospect that was lovely indeed. We lost our way several times more in the maze of little field paths, but finally we scrambled down a long kind of mud staircase to Parang Meshid, where our luggage and tent were waiting. It was half-past four o'clock, so that my plan of going forward to Gandarbhal was of necessity set aside.

October 11th.—The morning was deliciously fresh. It would have been pleasant to remain an hour or two amongst

the trees and fields, enjoying the fragrance of the air and the charm of the scenery. The little ruinous mosque, near which I took my breakfast in the early sunlight, was, I found, built over a spring of excellent water. It doubtless occupies the position of some ancient Naga shrine. At 7.30 we started down the fair valley, and soon crossed the river to its left bank. The path was stony, and unpleasant for quick going, but I was in no particular hurry, and gladly permitted the pony to take me at his own pace up a long slope that mounted amongst the southern woods towards the shoulder overlooking the corner of the valley near its opening into the plain. We presently gained the edge of a canal, and followed it, enjoying the most charming views through gaps between the trees. At the corner we emerged on to a large level plateau, splendid with trees in scarlet and crimson, brown and gold. Here we forged swiftly ahead, and had not gone far, when lo! the broad, fair vale of Kashmir, glittering through a gossamer pall of atmosphere and encircled by a faint blue wall of battlemented hills, with grey lines of cloud floating motionless above them, and a grey-blue sky over all. Again it was the softness of all visible things that struck me as the keynote in the charm of Kashmir.

Our plateau gradually dipped to the plain as we left the forest-clad hills behind. We ceased to look down on the wide area of cultivated lands, dotted with villages and trees, spread out like a map before us. Trees and villages drew together into a dark, broken line, behind which the hills stood like a wall of air. The mountain world was left behind; we were on a flat and cultivated plain. Moreover, we seemed to have passed from autumn back into summer, for the trees had scarcely begun to turn from the fulness of their green, or to drop their leaves. Here and there a chinara was just a little brown on its southward side. It was a week or more before the autumn overtook us.

Our ponies were well pleased to have turf beneath their feet and flat ground before them. They trotted and can-

tered as fast as their stiff little legs could take them. At a second angle of the hills on our left we quitted the flat estuary of the Sind valley and were on the bed of the ancient lake. The twin hills that watch Srinagar stood in all their soft beauty before us, with their bases lost in bright mist. "What is the name of this place?" I asked, as we halted before some little wooden huts, apparently used for shops. "It is Gandarbal," replied a villager, offering me some delicious apples. "This is the place where the boats come to meet the sahibs when there is more water. They stop there under those trees; but now the canals are dry." We quitted our hospitable friends and trotted along a winding path that followed the very foot of the hills. Two yards to our right were the rice-fields of the plain, with a varnish of water lying brightly upon them. Two yards to our left were the naked rocks of the hills, the



ON THE JHELAM, SRINAGAR.

foundation-stones of the great Himalaya. I was reminded of a place in the streets of Brescia, a bit of pavement in front of the cathedral, where, at the joint between two flagstones, the slope of the Alps visibly commences.

The slope on our left was continually changing and revealing new charms, but away to the right, beyond the rice-fields and the mist that oozed out of them, was ever the line of dark trees and the Pir Panjal mountains above, fainter than the clouds. Again we rounded a corner, and the mouth of the Arra valley was before us. A curving line of poplars led the eye to it. Fine Mahadeo is its northern sentinel. To the south a lovely crest of hill looks down on

the Dal Lake and dips at last to the Takht-i-Suliman and Hariparbat. We quitted the foot of the hills and struck across the plain, doing our best to follow devious little ways on ridges between the watery fields. The land resembles the Egyptian Delta as Herodotus saw it. "Canals occur so

often, and in so many winding directions, that to travel on horseback is disagreeable, but in carriages impossible" (ii. 108).

Our winding way led through many a little hamlet and past beautiful bits of foreground. The peasants were glean- ing in the fields or building little stacks of rice-straw in the shape of English hay-cocks. A man met us carrying a paddle, and we knew that navigable water could not be far off. A flock of Mina birds, harshly chattering, swooped down close beside us on to the backs of grazing cattle, half a dozen together on the same unconcerned cow.



IN SRINAGAR.

The little black calves licked each other's soft coats. A faint breeze hummed in my ears and mingled with the music of water falling out of a rice-field into a channel at a lower level. Crows were calling "Maud" from the chinar trees. Everything was peaceful, kindly, and of good omen. Nature showed her endless generosity.

“Nimmer, das glaubt mir, erscheinen die Götter,
Nimmer allein.”

Thus, sometimes wading through boggy fields, sometimes following tiny ridges, now jumping little canals, now tracing the crests of banks, we reached the village of Golab Bagh. A little way beyond it we met the admirable Salama, sent forward to welcome us by Roudebush, and fraught with all manner of interesting gossip. He set us on the right way, by which we soon entered the chinar-planted park called the Nasim Bagh. We raced at full gallop down its grand central avenue. Our shouts were gaily answered. We dashed for the crest of a low mud-bank on our left; the smooth waters of the Dal Lake burst upon our view; at our feet were the boats that Roudebush brought from Srinagar to meet us.

I was on board in a moment, drinking—elixir divine! shall I name thee?—Beer! There were tables to eat at and chairs to sit on; objects, too, of fancy cookery, and, better still, bread and decent butter. But the reader cannot conceive the delight conveyable by such things, unless he has chanced to be long deprived of them. For the rest of the day I was content to lie idle in a long chair, alternately smoking, eating, and drinking, without system and without thought. The boat at some time got under way, and I now and then looked out under the matting curtains and saw that the views were as lovely as they had been precisely that day six months before, when we spent the bright spring hours upon the same waters, and, I believe, in the self-same boat, taking leave of the plains to which all had now returned in safety.

After spending the days between the 11th and 23rd of October encamped in the Chinara Bagh* at Srinagar, I

* We were obliged to camp in the Chinara Bagh because the Assistant Resident would not permit us to occupy one of the many empty banglas in the Munshi Bagh. In vain I told him that his predecessor had placed two at my disposal six months before, and that I had important collections, which it was inadvisable to repack in the open air. He refused any accommodation, saying that, according to the rules, the banglas were only

left Roudebush and McCormick there and proceeded to Abbottabad, which I reached on the 28th. The Chinari Bagh was in a damp and fever-giving state, and presently McCormick fell ill with typhoid. I only heard of this when I was at Simla. Roudebush nursed him, and Dr. Neve attended him to a good recovery. He did not arrive in England, with Roudebush, till January 17th. At Abbottabad, Zurbriggen left me to take up an appointment, which, however, came to nothing; so he hastened on to Bombay, where, when I rejoined him, he was recovering from a sunstroke. I was again most hospitably entertained at Abbottabad, and found it hard to tear myself away from the pleasant place and its kindly garrison. Captain E. St. C. Pemberton, R.E., joined me there, having recently arrived from England by way of Russia, Siberia, Kulja, Chinese Turkestan, the Kilik Pass, Hunza, Gilgit, and Srinagar. Together we went to Peshawar, whence we visited the Khyber Pass in company with Major-General Sir Henry Collett, K.C.B. I left Pemberton at Rawal Pindi and hastened to Simla, to give an account of myself, stopping by the way at Amritsar and, with Churcher, at Amballa. From Simla I visited Saharanpur to look over our botanical collection with Mr. Duthie. After spending a few days at Delhi, Agra, and Gwalior, and visiting the Sanchi Tope, I arrived at Bombay on November 27th. Zurbriggen sailed with me from Bombay on December 1st. He quitted me in Italy for his home, and I reached London on December 20th, just in time for the Annual Dinner of the Alpine Club.

for men accompanied by their wives. The rule he was referring to, however, runs in these words: "Except in special cases the houses in the Munshi Bagh are for married people." It is Rule No. 17. This gentleman, whose name I refrain from mentioning, was the only disobliging official, English or native, that I encountered in India. The result of his action was McCormick's fever, as mentioned above.

GLOSSARY.

ALP. A summer pasturage.
Anna. About one penny.
Arête. A ridge, often narrow.
Arrak. A crude sort of spirit.
Atar. Flour.

BABU. An educated Hindu.
Bakri. Goats.
Bangla. A house.
Banias. Shop-keepers.
Bergschrund. A crevasse, like a moat, at the foot of a snow slope. It is often 20 to 50 feet wide, and of very great depth.

CHAMBA. The Sanscrit Maitreya, the coming Buddha.
Chang. A kind of beer.
Chapattis. A sort of unleavened bread.
Chapplis. Sandals.
Charogne. Carrion.
Charpoi. Bedstead.
Charu. White hawthorn.
Cheriss. A preparation of hemp.
Chilki. A silver coin.
Chinar. Plane tree.
Chish. Desert, rocky, or snowy high places.
Chit. A writing, letter, character, or testimonial.
Chorten. A Tibetan religious monument.

Climbing-irons. A framework with large spikes to fasten on the boots.
Clinometer. An instrument for measuring vertical angles.
Col. A mountain pass.
Cornice. Snow or ice projecting from a ridge and overhanging the slopes below it.
Couloir. A steep gully or furrow in a mountain side.
Crevasse. A rent or crack in a glacier.

DÂK. The mail post.
Dâk bangla. A house of rest at the end of a day's march along any of the main roads.
Dâk walas. Post runners.
Dud. Milk.
Dû-Khang. The assembly-room in a gonpa.

EKKA. The ordinary one-horse, two-wheeled, springless, native vehicle.

FAKIR. A religious ascetic, or beggar.
Fan. The conical pile of fallen stuff at the foot of a gully.

GHI. Clarified, and usually rancid butter.

Gi. Sir.
Glacier carré. The name of a small glacier on the Meije in Dauphiny.
Glacier table. A flat stone supported on a column of ice.
Gom wala. Villager.
Gonpa. Buddhist monastery, the abode of one or more lamas.

HAVILDAR. A native officer corresponding to sergeant in European regiments.

Hazor. A title of respect.

ICEFALL. A much torn and crevassed portion of a glacier, due to a steep slope in the rocky bed over which it passes.

Iskander. Alexander.

JALDI JAO. Go quickly!

Jhula. A rope-bridge (for description, see pp. 145-7).

Jüdel. To shout in falsetto, like a London milk-seller.

KHAD. The slope of a hillside.

Kibleh. The direction of Mecca.

Kilta. The ordinary coolie pack of the country—a leather-covered basket.

LAMASERY. A gonpa.

Lambudhar. Headman of a village.

Lammergeier. A vulture. *Gypactos barbatus.*

Lato. A cubical Tibetan monument.

Lingam. A Hindu religious emblem.

Liwan. The covered-in Meccaward end of a mosque.

Lunghi. A piece of stuff for winding into a turban.

MAIDAN. A flat place.

Mani. A name applied to almost any Lamaist sacred object.

Masjid. Mosque.

Matam Sara. A Shia place of worship.

Meydah. Part of a mosque.

Mihrab. A recess in the wall of a mosque, to mark the Kibleh.

Mimbar. A pulpit.

Moraine. Stone *débris* carried by a glacier.

Moulin. An aperture in a glacier, caused by water falling down a crack in its surface, which it eventually enlarges to a well-like form.

Muezzin. A Mohammedan crier of the hour of prayer.

Mullah. An honorary Mohammedan title, in consideration of purity of life, or from holding some religious post.

Munshi. A scribe or interpreter.

NALA. A valley.

Namdah. A kind of felt rug, or blanket.

Naukars. Coolie-servants.

Nautch. A dance.

Nazdik. Near.

Nefer Tum. An ancient Egyptian sunset god.

Nevé. The higher region of a glacier.

OM MANI PADMI HUM. Buddhist invocation.

Ovis Poli. The wild sheep of the Pamirs.

PABBU. A kind of boot made of raw sheepskin.

Parao. A day's march.

Parri. A precipice.

Parwana. An official document giving certain powers to the bearer.

Pashmina. A fine woollen material.

- Pashtu.* The language of the Pathans.
- Pathan.* A race common in Afghanistan.
- Pattis.* • Bandages wound round the legs for gaiters.
- Plane-table.* A drawing-board for surveying purposes.
- Prismatic compass.* A compass employed for measuring horizontal angles.
- RAMADAN.** The Mohammedan Lent.
- Roches moutonnées.* Rocks rounded by ice-action.
- Rucksack.* A loose bag slung on the back with straps like a knapsack.
- Rung.* An alp, or high pasture.
- SANGARS.** Stone walls to protect riflemen.
- Schrund.* A crevasse.
- Serac.* An ice tower formed by the intersection of crevasses.
- Serai.* A rest-house for the accommodation of travellers.
- Shahbash.* Good!
- Shias.* A great Mussulman sect.
- Shikari.* A hunter.
- Shina.* A tribe of the Hindu Kush.
- Soubardar.* A native captain.
- Sphygmograph.* An instrument for recording the pulse on paper.
- Stone-man.* A cairn of stones.
- Suranai.* A reed-pipe.
- TALUS.** A sloping heap of rock fragments lying at the foot of a precipice.
- Tamarei.* A stone-man or cairn.
- Tamasha.* A festivity.
- Tehsildar.* A native civil officer.
- Temenos.* A sacred enclosure.
- Tiffin.* The mid-day meal, or lunch.
- Tonga.* A two-horse vehicle.
- Tope.* A monument erected over a Buddhist relic.
- Trangpa.* Headman of a village.
- VIHARA.** A Buddhist monastery.
- WALA.** A man.
- Wasserleitung.* An irrigation canal.
- YAK.** A species of ox, *Poephagus grunniens*.
- ZIARAT.** The tomb of a Mussulman saint.
- Zigguratt.* An ancient Chaldean temple.
- Zuk.* Goatskin raft (*see* pp. 569-74).

INDEX.

A.

Abbottabad, Start from, 25.
 Abbottabad, View from Brigade Circular, 23, 170.
 Abbottabad, 18, 19, 696.
 Aden, 8.
 Af-di-gar, 532.
 Altitudes, Determination of, 631.
 Alumpi La, 103.
 Amarnath, 680.
 Amar Sing Thapa, 21, 158, 202, 284, 355, 438, 520.
 Arpi Harrar, 323.
 Arra valley, 693.
 Arundo, 241, 350, 353, 357.
 Askardo. *See* Skardo.
 Askole, 398, 401, 411 *et sqq.*, 546, 551, 552, 553, 557.
 Askole bridge, 555.
 Askordas, 236.
 Astor, 108 *et sqq.*
 Astor valley, 104, 106, *et sqq.*
 Atara, 177.
 Avalanches, 194, 197, 201, 268, 333, 679.
 Avalanches of mud. *See* Mud-avalanche.
 Avalanche of ice, 267, 495.
 Avalanche of rock, 555.
 Avalokita, 640, 659, 663, 668.
 Avantipur temples, 49, 689.
 Awkbassa, 301, 313.

B.

Baba Darbesh, 78.
 Babu-Sar pass, 30.
 Bagicha, 594.
 Bagnota, 22.
 Bago Drokpo, 625.
 Bagrot glacier, 154 *et sqq.*
 Bagrot pass, 143, 178, 193, 273.
 Bagrot valley, 148 *et sqq.*
 Bagrot valley, Start for, 144.
 Baltal, 679, 680.
 Baltis in Nagyr, 243.
 Baltistan, 349, 389 *et sqq.*, 565, 602.
 Baltit, capital of Hunza, 235, 237, 249 *et sqq.*
 Baltoro, 433, 546
 Baltoro glacier, first camp, 443.
 Baltoro glacier, Foot of, 430 *et sqq.*, 544 *et sqq.*
 Baltoro glacier, Ice-pinnacles on the, 493.
 Baltoro glacier, Start up, 438.
 Baltoro Needles, 440, 543, 545, 546.
 Baltoro valley, 424 *et sqq.*
 Bandipur, 65, 70.
 Banduko, 594.
 Bangla, 77.
 Bannok La, 116.
 Bannok mountains, 117.
 Bapo Ding Malik Bakanz, 360.
 Bardicha nala, 119.
 Bardumal, 429, 547.

- Bari Rung, 163, 164, 166, 172.
 Barpu, 298.
 Barpu glacier, 297 *et seq.*
 Barpu valley, 275.
 Barramula, 37.
 Barshu Muts, 258.
 Basha river, 353.
 Bazgo, 626, 656.
 Bears, 180, 183, 185.
 Berichu, 243.
 Bhaniyar, 35, 36.
 Bhut Kol pass, 606.
 Biafo glacier, 382 *et seq.*
 Biafo glacier, Foot of, 409, 417, 419, 422, 434, 550, 557.
 Biafo snowfield, 378, 386.
 Biaho river, 417, 419, 422, 424, 427.
 Biaho valley. *See* Baltoro valley.
 Big Stone Camp, 134.
 Bilargo, 599, 600.
 Bilarme, 103.
 Birchwood Ridge, 186.
 Birkat, 245, 286.
 Bitermal, 331.
 Black Mountain, 23, 24.
 Blukro, 573, 578.
 Boggy Camp, 397, 398, 400.
 Boiohagurdoanas, 247, 258, 259, 268, 269.
 Boots, 510.
 Braldo pass. *See* Hispar pass.
 Braldo valley, 353, 407, 409, 410 *et seq.*, 584.
 Bride peak, 460, 493, 505, 521, 531, 533.
 Bridge over Indus at Bunji, 132, 213.
 Broad peak, 470, 471, 525, 531, 532, 540, 541.
 Brolmo, 599.
 Bruce's sprain, 541, 544.
 Bualtar glacier, 291, 294, 296.
 Bualtar valley, 275.
 Bubuli Mutin, 237, 238, 258.
 Buddhist country, 607 *et seq.*
 Buddhist figure at Gilgit, 143, 666.
 Buddhist paintings, 639, 640, 658, 659.
 Budlas peaks, 268, 269, 292, 298, 31328, 334, 340, 370.
 Bulchi, 153, 154, 155, 207.
 Bunji, 123, 126 *et seq.*, 130 *et seq.*, 170.
 Burchi, 175, 204.
 Burchi glacier, 187, 205, 206.
 Burchi peaks, 193, 197, 198, 205, 291.
 Burme nala, 132.
 Burzil Camp, 86 *et seq.*
 Burzil pass, 71, 86, 88, 96, 99.
 Bust in snow, 91.

 C.
 Camera, Accident to, 165, 183.
 Camera, Kinds of, 165, 166.
 Camp furniture, 68.
 Chakesar, Mountains of, 23, 24.
 Chakoti, 33.
 Chalt, 218.
 Chamba, 610, 656, 658, 666.
 Chaprot, 218, 219.
 Charok, 586.
 Chashmah Shahi garden, 43.
 Chattergul, 687.
 Cheriss, 667, 669.
 Chiaravalle, Il Doppio Pescatore di, 509.
 Chilang, 98.
 Chilas, 30, 121, 122, 131, 144, 161, 164.
 Chinar Bagh, Srinagar, 40, 695.
 Chiring, 341.
 Chiring Chish, 159, 161, 163, 164, 167, 180.
 Chogo peak, 165, 298, 299, 318.
 Chogolisa peaks, 454.
 Chokutens, 334.
 Chortens, 608, 610, 613, 617, 622, 624, 626, 637, 689, 640, 641, 662.
 Choshi valley, 261.
 Chuchor La, 100.
 Chur glacier, 342.
 Climbing-irons, 515, 519, 520, 526.
 Clothing, 67.

- Cloud phenomena, 185, 194, 201, 203,
308, 326, 373, 472, 478, 514, 516,
531.
- Clowan, 663.
- Cooking apparatus, 480, 481, 507.
- Corner Camp, 539, 540, 541, 542.
- Crystal peak climbed, 463 *et seq.*,
540, 541.
- Crystal peak, View from, 460.
- D.
- Dachkot nala, 123.
- Dainyor bridge, 146, 209.
- Dainyor valley, 136, 169, 178, 210.
- Dainyor village, 147, 209.
- Dal Lake, 42, 43, 56, 687, 695.
- Damot nala, 126.
- Dance of Lamas, 645, 646, 647.
- Dancing, 81, 112, 558.
- Dar, 206.
- Daranshi saddle, 269, 275.
- Darapo, 325.
- Darel, Mountains of, 170, 201.
- Darso Brok, 561.
- Das, 100.
- Dashkin, 116, 117, 118.
- Dasskaram Camp, 307.
- Dasskaram Needles, 306 *et seq.*
- Datuchi, 150, 207.
- Defries cooking-stove, 480.
- Deosai, 100, 577, 578.
- Dirran, 155, 156, 157, 163 *et seq.*,
171 *et seq.*
- Dirran peaks, 150.
- Dirran, Crown of, 193, 205, 253, 269,
275, 291, 299.
- Dirran, Spear of, 159.
- Dichell nala, 103, 119.
- Dichell peak, 119, 121.
- Dochu, 589.
- Dodargali pass, 170.
- Dog and meat story, 440.
- Doian, 119.
- Doksam, 563.
- Dom, 243.
- Domani Chish, 224.
- Domel, 29, 31, 32.
- Dorikun pass. See Burzil pass.
- Dras, 673.
- Dras bridge, 601, 671.
- Dras valley, 597 *et seq.*, 670 *et seq.*
- Dreary Camp, 548.
- Dubanni, 122, 131, 156, 159, 161,
164, 177, 201, 203.
- Ducks and drakes, 441.
- Dumultier glacier, 399.
- Dundul, 673.
- Dust-storm, 28.
- E.
- Earth-pyramids, 148, 428, 662, 663.
- Ekkas, 25.
- Emerald peak, 164, 178, 190, 194,
276.
- Emerald saddle, 184, 197, 291.
- Equipment, 66.
- F.
- Fairies, 176, 177, 256.
- Fakir, 34, 581, 587.
- Fakkar, 232, 234, 239, 261, 582.
- Fan Camp, 466, 472, 479, 536.
- Fan glacier, 466.
- Fan saddle climbed, 468 *et seq.*
- Fans of debris, 85, 128, 428, 547,
628.
- Feriole glacier, 441.
- Fiang, 628.
- Fish, 547.
- Five Virgins of Latok, 393, 403, 407,
440.
- Flooded torrents, 417, 424.
- Folk-tales of Hunza, 256.
- Food, Forms of, for mountaineers, 67,
313, 514.
- Footstool Camp, 480, 485, 494 *et
seq.*, 530, 533, 536.
- Fotu La, 614, 665.
- Frost-bite, 512, 515, 517.
- G.
- Gahari Habibulla, 29.

- Gahori, 586.
 Gamba Do, 589.
 Gandar, 339.
 Gandar Chish, 374.
 Gandarbal, 669, 691, 693.
 Gangan, 599.
 Gandhara sculptures, 36, 690.
 Ganish, 249.
 Gardens of Kashmir, 43, 59, 61.
 Gargo, 164, 175, 179 *et seq.*
 Gargo glacier, 179 *et seq.*, 193, 195.
 Garhi, 32.
 Garum Bar, 332.
 Ghoresamakar bridge, 421, 423, 424, 549.
 Ghor, 582.
 Gidiaghdo, 594.
 Gilgit, 137 *et seq.*, 209.
 Gilgit, Rainfall at, 142.
 Gilgit road, 29, 30, 37, 71.
 Gilgit valley, 122, 133.
 Glacier advancing, 189, 546.
 Glacier lakes, 337, 546.
 Glacier lake-basin, 494.
 Glacier retreating, 193, 207, 230, 290, 297, 339, 419, 452, 549.
 Glacier tables, 399, 402.
 Goats' Delight Camp, 536.
 Godhai, 102.
 Godwin-Austen glacier, 454, 459, 470, 474, 477, 478.
 Gohr Aman, 176, 177, 293.
 Gol, 582, 583.
 Golab Bagh, 635, 649.
 Golden Parri, 245, 279, 288, 298, 300, 328.
 Golden Throne, 452, 455, 456, 460, 477, 485, 486, 489, 493, 494, 500, 506, 516, 522, 524.
 Gomun, 399.
 Gonpa, 608, 610, 612, 617, 624, 634, 638 *et seq.*, 656, 658, 659, 660, 662, 667.
 Gonpa garden, 645.
 Gosona glacier, 156.
 Green Parri, 411, 551.
 Growling peak, 269, 274, 275.
 Guide, Use of a, 474.
 Gujal peaks, 291.
 Gujal valley, 237, 238, 243, 249, 253.
 Gulmet, 221 *et seq.*
 Gund, 685.
 Gungurbal, 687, 691.
 Gurai, 73.
 Gurais, 75, 76, 78, 674, 691.
 Gurkhas, 20, 70, 73, 82, 158, 171, 194, 277, 386.
 Gusherbrum, 443, 445, 452, 454, 474, 493, 500, 525, 532, 537.
- ### H.
- Habakhotan, 77.
 Haigutum, 345, 351, 354, 355, 360, 361, 366, 369.
 Haigutum glacier, 352, 354, 356, 360, 369.
 Haji Pir, 35.
 Hangru, 621.
 Haramok, 73, 687, 691.
 Haramosh, 131, 136, 164, 165.
 Harcho, 116.
 Hardas, 600, 602, 671.
 Hariparbat, 694.
 Harkbir Thapa, 214, 219-21, 323, 457, 482, 526, 528.
 Hassan Abdal, 17.
 Hatti, 31, 32.
 Hatu Pir, 116, 118, 119, 121, 122.
 Haze in the air, 116.
 Hazratbal mosque, 59.
 Hidden peak, 493, 499, 531, 532.
 Himalayas, Watershed of, 100.
 Himis, 634, 636 *et seq.*
 Hinarchi, 172.
 Hinaskut, 613.
 Hispar, 325 *et seq.*, 350.
 Hispar glacier, 328 *et seq.*
 Hispar pass, 361 *et seq.*
 Hispar pass, Start for, 330.
 Hispar pass, History of the, 241, 342, 381, 415.
 Hispar pass, Top of the, 377.

Hispar Snowfield Camp, 366.
 Hispar valley, 287, 320, 322 *et sqq.*
 Hollow Camp, 538.
 Holshal, 289, 293, 296.
 Hopar glacier, 288, 289, 290, 293, 297.
 Hopar valley, 275, 287 *et sqq.*
 Hopar villages, 289, 350.
 Hunnuno, 291.
 Hunza civilisation, 251.
 Hunza passes, 144.
 Hunza peaks, 232, 235, 291, 314, 317, 328.
 Hunza tribes, 253.

I.

Ibex, 312.
 Ibex, Drawings of, 580, 671.
 Ibex peak, 159, 161, 162, 164.
 Icefall of the Throne glacier. *See* Seracs.
 Indus valley, 121, 123, 127, 130, 562, 573 *et sqq.*
 Indus valley in Baltistan, Scenery of, 590.
 Indus valley in Ladak, 621 *et sqq.*, 671.
 Irrigation, 236, 239, 245, 250, 260, 265.
 Islamabad, 44.

J.

Jaglot nala, 169.
 Jeshat nala, 85.
 Jhelam valley, 30, 32 *et sqq.*
 Jhula. *See* Rope-bridge.
 Junction Camp, 478 *et sqq.*, 534.

K.

"K. 2," 459, 469, 470, 474, 477, 478, 479, 486, 489, 524, 525, 531, 532, 540, 541.
 Kafiristan explored by Dr. Robertson, 209.
 Kaj-Nag, 24, 80, 32, 38.
 Kamar, 154, 156, 163, 166, 167, 171.

Kamar glacier, 164.
 Kangan, 686.
 Kangi station, 614.
 Kanibasar Camp, 363.
 Kanibasar glacier, 363, 364, 365.
 Kanknai, 687.
 Kanzalwan, 74.
 Kapalu, 531, 588.
 Karachi, 10.
 Karakoram pass, 631, 633, 667.
 Karakorams, 100.
 Karbir Thapa, 142, 162, 251, 323, 373, 453, 457.
 Kargil, 599, 602, 604, 605, 669.
 Karrim, 101.
 Kashgar, 631, 633.
 Kashmir, Vale of, 37 *et sqq.*, 692.
 Kashmiri boats, 38, 39 *et sqq.*
 Khaghan valley, 28, 29, 30.
 Khalsi bridge, 622, 661.
 Khaltar, 164, 175, 195, 298.
 Kharbu, 612, 665.
 Khokun valley, 532.
 Khotan, 633, 669.
 Khurmang, 588, 589, 597.
 Kiltas, 53.
 Kiris, 583.
 Kirkichu, 671.
 Kishanganga, 31, 32, 74, 77, 691.
 Kisro Khan, 255.
 Kit for climbing, 67.
 Kola biscuits, 314, 457, 518.
 Kondus saddle, 460, 485, 516, 521, 522, 531.
 Kondus valley, 522, 531, 532.
 Korofon, 419, 549.
 Kumango, 587.
 Kumri pass, 78, 84.
 Kusuru, 588.
 Kuzburthang, 585.

L.

Ladak, 630 *et sqq.*
 Lahor, 13.
 Lak glacier, 338, 340, 342.
 Lama dance, 645-7.

Lamaism, 607.
 Lamasery. *See* Gonpa.
 Lama-yuru, 617-20, 662.
 Lancum i Brangsa, 416.
 Laskam, 421, 422.
 Lato, 622.
 Latok glacier, 393, 398, 399.
 Leh, 577, 601, 603, 628 *et sqq.*, 650
et sqq.
 Lhasa, 640, 642.
 Library of a gonpa, 641, 657, 664.
 Lila Ram, 70, 158.
 Liligua glacier, 545.
 Liscomb, 116.
 Losun, 607.
 Lower Plateau Camp, 512, 513, 528.

M.

Mahadeo, 698.
 Main Chiush, 333.
 Makorum, 341, 351.
 Manasbal, 38.
 Mangjong, 556.
 Mango Brangsa, 402.
 Mango Gusor, 414, 417, 419, 421,
 422, 461, 553, 568.
 Mangsang, 596.
 Mani mounds, 607, 617, 622, 624,
 627, 634, 637, 662.
 Mansera, 27.
 Mantoka, 585.
 Mapnun, 85.
 Marching, Method of, 82.
 Marmots, 265.
 Maroll, 597.
 Martand temple, 47.
 Masherbrum, 446, 447, 460, 540, 541.
 Masherbrum pass, 539, 540, 541, 542.
 Miachar, 230.
 Mikiel, 103, 104, 105, 107.
 Minappon, 229.
 Minawar, 135, 148.
 Minimerg (Burzil), 88.
 Minimerg (Zoji), 677.
 Mir Camp, 302 *et sqq.*, 311, 313.
 Mitre peak, 497, 536.

Molto, 353.
 Moraine-covering of Biafo glacier,
 408 *et sqq.*
 Moraine-covering of Hispar glacier,
 337.
 Moraines, Ancient, 103, 104, 193,
 228, 236, 239, 290, 585.
 Moravian missionaries, 631, 633, 653.
 Mosques, 567, 568, 570, 582, 583,
 586, 587, 692.
 Moulin, 394, 406, 408, 448, 494.
 Moussa-ka-Masala, 23 note, 24.
 Mud-avalanche, 127, 130, 323, 411,
 427, 618, 625, 628.
 Mulbei Chamba, 610, 666.
 Mülbekh valley, 608.
 Munshi Bāgh, Srinagar, 40, 42.
 Muski valley, 674.
 Mustagh pass, Younghusband's, 445,
 447, 532, 542.
 Mustagh Tower, 459, 497, 498, 525,
 542.
 Mutain, 675.

N.

Nagai valley, 85.
 Nagyr bridge, 248.
 Nagyr town, 240, 277 *et sqq.*
 Nagyr valley, 237 *et sqq.*
 Nambla Brangsa, 406.
 Namdahs, 633, 667, 669.
 Nam-gyal-na-wang, 657.
 Namika La, 611, 612.
 Nanga Parbat, 73, 101, 107, 111,
 120, 121, 131, 132, 479.
 Nasim Bagh, 59, 687, 695.
 Nikpal hill, 605.
 Nilt, 219, 220.
 Niltar, 145.
 Nimo, 627.
 Nishat Bagh, 61.
 Nomal, 216.
 Nomal valley, 215.
 Nose, The, 410, 417, 551.
 Nun Kun peaks, 606.
 Nurla, 623, 660. °

Nurr, 581, 582, 583.
 Nushik La, 143, 332, 345, 349 *et sqq.*,
 362, 369.
 Nushik La, History of the, 241, 349.

O.

Ogre peak, 378, 386, 390, 393, 398.
 Ogre's Camp, 388, 398.
 Ogre's Fingers, 386, 389.
 Oldingthang, 597, 606.
 Oprang valley, 443, 531.

P.

Pabbus, 271, 438.
 Paipering Maidan, 300, 314.
 Pamirs, 130.
 Pandras, 674.
 Pandrethan temple, 41, 50.
 Parang Meshid, 687, 691.
 Parbir Thapa, 1, 75, 101, 121, 158,
 284, 355, 438, 458, 520.
 Parkutta, 585.
 Pashmina, 569.
 Paskiyun, 606, 668.
 Piale Camp, 445.
 Piale glacier, 445, 447, 542, 554.
 Pioneer peak, Ascended, 502 *et sqq.*
 Pioneer peak, Height of, 524.
 Pioneer peak, Start for actual climb,
 517.
 Pioneer peak, Top of, 522.
 Pir Panjal, 17, 37, 44, 48, 60, 71,
 693.
 Pisan, 228.
 de la Concorde, 454, 536.
 433.
 Polo, 111, 259.
 Pool Camp, 452, 454, 460, 462.
 Port Said, 3.
 Pressure, Effects of diminished atmo-
 spheric, 200, 270, 377, 381, 389,
 458, 461, 493, 508, 517, 520, 522,
 524, 528, 530, 538.
 Pristi, the dog, 26, 134, 208, 209,
 218, 354, 421, 465, 473, 496, 500,
 557, 571, 602, 669.

Punmah valley, 414, 421 *et sqq.*, 525,
 548, 549.
 Purik, 605.

R.

Rahim Ali, 25, 27, 39, 139, 481.
 Rajdiangan pass. *See* Tragbal.
 Raki, 176, 178.
 Rakipushi, 119, 121, 131, 136, 159,
 161, 169, 172, 184, 218, 219, 228,
 233, 235, 263, 318, 319.
 Ramghat, 123.
 Rampur, 35.
 Rash huts, 320.
 Rash ridge and passes, 299, 302,
 317 *et sqq.*
 Rattallo, 289 *et sqq.*
 Rawal Pindi, 17, 31.
 Rdzong, 399.
 Red Sea, 7.
 Ridge peak, 370.
 Rob Roy cooking apparatus, 481, 507.
Roches moutonnées, 236, 310.
 Rochester crags, 430.
 Rope-bridge, 145.

S.

Saddle peak, 299, 303, 309, 313.
 Saddles, 259, 598.
 Sahling, 585.
 Saltoro pass, 532.
 Saltoro river, 531.
 Samaiyar, 243, 256, 277, 263, 264.
 Samaiyar glacier, 265.
 Samaiyar valley, 237, 261, 264 *et*
sqq.
 Samaiyar Bar, 300, 318.
 Sanerwain, 65.
 Sarpolaggo river, 532.
 Saspul, 624, 658, 659.
 Sat, 153, 154, 175, 178, 206, 207.
 Satasarn pass, 691.
 Secret glacier, 493.
 Sepultar valley, 291, 292.
 Serac Camp, 506, 529.

- Seracs of the Throne glacier, 496,
 498, 502 *et sqq.*, 529.
 Serban ascended, 24.
 Sermi, 584.
 Serpent's Tooth, 170.
 Shah Hamadan mosque, 40, 53, 279,
 567, 586, 587.
 Shaiyar, 235.
 Shalimar Bagh, 59.
 Shallihuru glacier, 299 *et sqq.*
 Shallihuru icefall, 309.
 Shaltar, 296.
 Shaltar nala, 119.
 Shargol, 608, 609, 667.
 Shey, 635.
 Shigar, 357, 413, 568.
 Shigar valley, 562, 565 *et sqq.*
 Shimshal pass, 532.
 Shinas, 178, 243, 254.
 Shinkan valley, 429:
 Shiriting, 594.
 Shoata, 563.
 Shoti, 243, 416.
 Shukurri, 327.
 Shushot, 634.
 Shyok, 531, 583, 584.
 Sickness, Mountain, 97.
 Sinakar, 149, 177, 208.
 Sind valley, 38, 669, 679 *et sqq.*
 Singing, 80, 81, 96.
 Skardo, 116, 349, 353, 357, 358, 413,
 569, 574 *et sqq.*, 601.
 Skin-raft, 353, 357, 569, 570, 572.
 Skoro, 564, 565, 579.
 Skoro La, 413, 561, 562.
 Skulls of Nagyri, 245.
 Slel. *See* Leh.
 Snow-Lake Camp, 382.
 Sonamerg, 681, 682.
 Sorcerers, 255.
 Spedding and Co., 31, 71, 85, 87.
 Spittak, 628.
 Srinagar, 40 *et sqq.*, 577, 601, 655,
 693, 695.
 Srinagar, Start from, 62, 696.
 Stachikyungme glacier, 539, 541, 542.
 Storage Camp, 451, 480, 536.
 Strawberry Camp, 267 *et sqq.*
 Suez Canal, 7.
 Sulphur Camp, 200.
 Sunburn, 74, 99, 421.
 Suru river, 599, 602, 604, 670.
- T.
- Takht-i-Suliman temple and hill, 42,
 694.
 Taliche, 122.
 Tallel, 691.
 Tandiani, 22.
 Tara, 640, 641.
 Tarchik valley, 620.
 Tarkutti, 595, 597.
 Tarumsa, 606.
 Tashgom, 672.
 Tashot, 230, 234, 262.
 Tashot bridge, 261.
 Temples of Kashmir, 36, 42, 47, 49,
 50, 576, 673, 687, 688, 692.
 Tents, Kinds of, 66, 385.
 Tents, Mummery, 272.
 Terraced fields, 249.
 Thla Brok, 558.
 Throne glacier, 454, 467, 477 *et sqq.*,
 516, 525.
 Thunderstorms, 179, 188.
 Thurgon, 580
 Tibet, 630.
 Tikzay, 635.
 Tolti, 587, 588.
 Tonga, 17.
 Torgun valley, 594.
 Tragbal Camp, 71.
 Tragbal pass, 71, 73.
 Trough, The, 269, 272, 273.
 Trough Camp, 272 *et sqq.*, 276.
 Trubyling, 119.
 Tsong-kha-pa, 658, 668.
 Tusserpo La, 568.
- U.
- Uchubagan, 150, 167, 169, 177.
 Uchubagan pass, 167, 169, 170, 177.

Uli Biaho glacier, 441, 545.

Ultar glacier, 237, 238, 250, 262.

Upper Plateau Camp, 515, 527.

Uri, 33, 34, 35.

V.

Vigne glacier, 454, 536.

W.

Wakkha valley, 634 *et seq.*, 668.

Wangat temples, 688.

Wangat valley, 687 *et seq.*

White Fan. *See* Fan.

Wild Rose Camp, 298.

Windy Camp, 183, 193 *et seq.*, 203.

Wulah Lake, 37, 38, 65.

Y.

Yarkand, 601, 605, 606, 623, 631, 675.

Yarkand river, 532.

Yarkand serai at Leh, 632.

Yeshkuns, 178, 242, 243, 254, 331.

Younghusband glacier, 451, 452.

Z.

Zaskar, 620.

Zazur, 447.

Zoji La, 674 *et seq.*

Zoji La, Top of the, 679.

Zuk. *See* Skin-raft.



The Gresham Press,

UNWIN BROTHERS,

CHILWORTH AND LONDON.

WORKS BY THE SAME AUTHOR.

The Woodcutters of the Netherlands in the Fifteenth Century. In Three Parts. (1) History of the Woodcutters. (2) Catalogue of the Woodcuts. (3) List of the Books containing Woodcuts. Cambridge University Press, 1884. 8vo.

The Gallery of Art of the Royal Institution, Liverpool. With Twelve Autotypes. London and Liverpool, 1885. Folio.

The Artistic Development of Reynolds and Gainsborough. With Illustrations. London, 1886. 8vo.

Early Flemish Artists and their Predecessors on the Lower Rhine. With Twenty-nine Illustrations. London, 1887. 8vo.

Exhibition of Reproductions of the Works of Raphael in the Walker Art Gallery, Liverpool: Catalogue of Raphael's known Drawings, Pictures and Frescoes. Liverpool, 1887.

Literary Remains of Albrecht Dürer; with Transcripts from the British Museum Manuscripts, and Notes upon them by LINA ECKENSTEIN. Cambridge University Press, 1889. 8vo.

Dawn of Art in the Ancient World. London, 1891. 8vo.

THE FOLLOWING VOLUMES

(Forming Conway and Coolidge's Climbers' Guides)

Are under the Joint Editorship of

W. M. CONWAY AND W. A. B. COOLIDGE.

The Central Pennine Alps. London, 1890. Small 8vo.
By W. M. CONWAY.

The Eastern Pennine Alps. London, 1891. Small 8vo.
By W. M. CONWAY.

The Lepontine Alps (Simplon and Gothard). By W. M. CONWAY and W. A. B. COOLIDGE.

The Central Alps of the Dauphiny. By W. A. B. COOLIDGE, H. DUHAMEL, and F. PERRIN.

The Chain of Mont Blanc. By LOUIS KURZ.

The Adula Alps. By W. A. B. COOLIDGE.

The Mountains of Cogne. By GEORGE YELD and W. A. B. COOLIDGE. With Map.

The Range of the Tödi. By W. A. B. COOLIDGE.

